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BOROUGH OF BLYTH.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1945.

A.G. NEWELL, M.D.;C.M.;L.M.;D.P.H.

Public Health Department,
"Dinsdale"
Marine Terrace,
BLYTH,
Northumberland.

February 1945.

ERRORS AND OMISSIONS.

Page 2, Para.9 The last word should be " eclectics".
Page, 3. Paragraph - 14. Venereal Disease - The words (Sy. only) should read (sy.-Gon.).
Page 3, Para. - 19. The first two words are "My final "
Page 6, Para. - (4). The last two words in this para. are "uterine cancer".
Page 6, Para. - (5). The word "fallophin" should be inserted after ovary.
Page 16, (Line 10) The 3rd. word is "Liquification".
" " 4th.Para. -The 10th. line. The word "anaplyeaxis" should read "Anaphylaxis".
Page 17, 3rd. Para. The last line should read (3) Intracutaneous injection (Mantoux test).
Page 17, 4th. Para. The 9th. line is "But once " etc.
" " 9th. Para. The 10th. line should read "They may be absent".
Page 18, 3rd. " The 8th.line - "martality" should be "mortality".
" " 7th. " The word "cutaneous" should be inserted between "Patch and etc.)
Page 19, The first two words in the 3rd. line are "After Care"
" " In the 9th. line from the bottom of the page, the last few words should read "If you want to prevent".
Page 30, "BREAD". In the 4th. line "vitimans" should be "vitamins".
" " " The 7th. & 8th. words in the 6th. line are "oxidising agents".
Page 30, "BREAD". In the 16th. line "phtic acid" should be "phytic acid."
Page 31, In the 4th. line "6589 ft." should read "65 sq.ft.".
" 33, In the 12th. line "peroside" should be "peroxide".
" " Para. 3. In the 2nd. line the words in brackets should be (but not from coke), and in the 4th. line "soke" should be "smoke".

BOROUGH OF BLYTH.

SUPPLEMENT TO ANNUAL REPORT, 1945.

Transferable deaths for Quarter ending 31st.December,1945, received after Annual Report was typed.

The principal causes of Deaths (All ages) were as follows:-

	Males.	Feamles.	Total.
Heart & Circulatory	1	-	1
Brain Disease	1	7	8
Lung " (Non T.B.)	-	1	1
Kidney "	2	-	2
Pneumonia	1	2	3
Accident	2	-	2
Cancer	2	3	5
Prematurity	1	1	2
Tuberculosis:			
Respiratory	-	1	1×
Non-Respiratory	-	1	1×
Strangulated inguinal hernia	1	-	1
General Paralysis of Insane	-	1	1
Acute Gastric Enteritis	-	1	1
Paralysis Agitans	1	-	1
	12	18	30

4 of the above deaths were of children under 1 year, the causes of which were:-

Prematurity	2
Pneumonia	1
Acute Gastric Enteritis	1 - 4 Deaths.

Neo-Natal Deaths (Infants who died within 4 weeks included in the 4) - 2.

×Non-notified T.B. cases - 2 Deaths.

A.G. NEWELL.
Medical Officer of Health.

1st. March, 1946.

MEMBERS OF THE HEALTH COMMITTEE:-

Chairman - Alderman H. Donnachie.

Vice Chairman - Alderman J. Mitchell.

The Mayor,
Alderman Donnachie.
" Mitchell.
" Murdy,
Councillor Allen,
" Allison,
" Breadin,
" Carr,
" Crate,
" Curry,
Councillor Foy,
" Hamm,
" Kay,
" Kinsman,
" Raffell,
" Ridley,
" Ryder,
" Soulsby,
" Summers,
" Waters.

MEMBERS OF THE MATERNITY AND CHILD WELFARE COMMITTEE:-

Chairman - Councillor Mrs.M.L. Summers.

Vice Chairman - Councillor Mrs. J.G. Allison.

Chairman, Vice-Chairman and Members of the Health Committee.

Co-opted Members:-

Mrs. Coleman.
Mrs. Darling.
Mrs. Levy.
Mrs. Mitchell.
Mrs. Patience.
Mrs. Routledge.
Mrs. Robinson.
Mrs. Searle.
Mrs. Wilkinson.

STAFF OF THE PUBLIC HEALTH AND MATERNITY AND CHILD WELFARE DEPARTMENTS - 1945.

Medical Officer Of Health Medical Officer, M.&.C.W. Authority School Medical Officer Port Medical Officer	A.G.NEWELL, M.D.; C.M.; L.M. D.P.H. J. STOKOE, M.D.; B.S.; B.Hy.: D.P.H. (with H.M.Forces.)
Assistant Medical Officer Of Health and Assistant School Medical Officer.	C. BAINBRIDGE, M.B.; B.S.; B.Hy.; D.P.H.: (with H.M. forces.)
Ophthalmic Surgeon	A.T. PATERSON, M.D.; F.R.C.S. (Edin.); D.P.H.
Oto-Rhinologist	
Women's Advisory Clinic	MRS. D. SINTON, M.B.; Ch.B.
Ante-Natal Clinic	Medical Officer provided by the County Council.
Obstetric Emergency Service	PROFESSOR E.F. MURRAY, M.D.; F.R.C.S.; F.R.C.O.G. H.H. EVERS, M.B.; M.S.; F.R.C.S. F.R.C.O.G. F. STABLER, M.D.; F.R.C.S.; M.R.C.O.G. (with H.M. forces.) W. HUNTER, M.D.; B.S.; M.R.C.O.G.
Dental Surgeon	H.O.J. BEDGOOD, L.D.S.
Senior Sanitary Inspector	F.B. HARTLEY, M.S.I.A.
Deputy Senior Sanitary Inspector	J.G. SIMPSON, M.S.I.A.
Housing Inspector	A.P. ROBINSON, A.R.I.P.H.H. (with H.M. Forces.)
Health Visitors	MISS R.M. FINLAY, S.R.N.; S.C.M. MISS D. ROBSON, S.R.N.; S.C.M. MISS M. MURRAY, S.R.N.; S.C.M.
Temporary Shorthand Typists.	MRS. M. MORTON. MISS S. CLARK.
Clerk	J.F. GODFREY, (with H.M. forces.)
Temporary Overcrowding Clerks.	C. FELLOWS. T.G. MORALEE (with H.M. Forces.) T. WALTON.

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26th. February, 1946.

BOROUGH OF BLYTH.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1945.

Ladies and Gentlemen,

I have the honour to present to you my report on the Public Health and Sanitary conditions in the Borough of Blyth during the year 1945.

A Summary of the main Public Health aspects, comments, and suggestions will be found on the first few pages.

The various statistical tables which have been grouped at the end of the report will provide interesting figures on the main diseases and the housing conditions.

I feel grateful to those who, being interested in Public Health, have given me their support in my endeavours for the benefit of the Public.

To my brother officers, I offer my thanks in appreciation of their co-operation, as well as to all those who have helped me. I also appreciate the help of the lady helpers who voluntarily gave their time at the Welfare Clinic.

I remain,

Ladies and Gentlemen,

Your Obedient Servant,

A.G. NEWELL.

Medical Officer of Health.

To the Mayor, Aldermen,
and Councillors of the
Borough of Blyth.

COMMENTS BY THE MEDICAL OFFICER OF HEALTH.

1. **Vital Statistics**:- There was a slight decrease in the birth rate with a slight decrease in the general death rate. There was a definite decrease in the infant mortality rate (still high), and also among the neo-natal deaths. There was a lessened tuberculosis death rate, (·3 per 1,000). On the whole we had a healthier year.

2. **Distribution and Causes of Deaths**:- Of the total of 367 deaths 203 were in persons over 65 years of age(over 55%), and 38 (or 10.4%) were among infants under one year. The deaths from cancer numbered the same as last year (53) but there were double the number of deaths from cancer of the stomach and six cases of cancer of the Breast against one last year.

3. **Pathological Laboratory**:- My thanks are due to Dr. Messer for his co-operation in the examination of specimens sent by doctors and the samples from the Public Health Department.

4. **Infectious Diseases**:- There were less numbers of cases among each of the following:- Scarlet Fever, Diphtheria, Pneumonia, Whooping Cough, and Measles. Pulmonary tuberculosis totalled the same as last year. There was an increase of Cerebro Spinal Meningitis & Dysentery. There was no epidemic among any of these diseases. Of the 389 infectious cases among the civilians no less than 295 were among children under five years; and among the five year old there were 123 cases (entrants into school). The largest number of notifications (133) was in the age group 5 - 10 years.

5. **Diphtheria Immunisation**:- We had 108 cases of Diphtheria with 3 deaths and of these 3, one was immunised three years ago (and so lost protection given by immunisation). It will be seen from the table showing the monthly incidence for the last three years that most cases arise from September and continue to the end of March. This year the type of cases were of a milder nature, and so the fatality rate was half that of last year. The majority of the cases (77) were at the school ages of 5 to 15 years. Since 1941 to 1945 inclusive there were 562 cases of Diphtheria NOT immunised, and 205 among the immunised, and it must be remembered that among the latter were many those period off protection had passed off. Of 25 virulent, 12 were gravis.

Immunisation:- During the year 10.1 per cent of the child population were immunised. The total immunised to the end of 1945 was 6144. Of 58 cases among the immunised 46 of them occurred after 2 to 5 years had elapsed from date of immunisation and with 3 a longer period (and presumably 6 others also). The greatest risk to life is between 1-4 years of age. To neglect pre-school age is a half measure against Diphtheria prevalence. Immunisation of half the school aged children has no effect on the incidence of Diphtheria unless one-third of the pre-school age were also immunised.

6. **Tuberculosis**:- The number of notifications during the year was 64 and the total deaths from this disease was 24. This gives a crude death rate of 0.78 per 1,000 as compared with 0.61 per 1,000 for the County of Northumberland in 1944 and 0.62 for England and Wales for 1944 (latest returns) per population. Of 254 cases on the register to the 31st. December, 1945, no less than 208 (or 81.8 per cent) are of the pulmonary type. Of these 208 cases 56 (or 26.9 per cent) are new pulmonary cases. These new pulmonary constitute 11.7 per cent of the total number of infectious diseases (475) notified during the year. There were 64 notifications of all forms giving 13,4 per cent of all notified diseases. Practically half of the 64 notifications came from Plessey Ward (23 cases) and nearly half of the total deaths from tuberculosis occurred in the same ward. The deplorable part of these new cases is that practically half occur among the young adults of 15 to 25 years of age, and little less than two-thirds were among the 15-35 ages; and, further, practically half were among females at their most productive period and marriageable age. This shows the necessity of parental and managerial care of girls who first take up work. A weak primary tubercular infection can light up with late hours, excessive energy with inadequate food and bad hygiene conditions at home or workshop.

The bad habit of smoking many cigarettes (now known to contain arsenic) excites congestion and catarrh besides often keeping off the appetite at the time of life when a good one is a blessing to them. I have made a diagrammat representation of the notifications of Tuberculosis in Blyth since 1919. It will be seen that from 1921 to 1929 there was a continuous yearly high number (over 83 to 117) of cases and that a drop came in 1930 with 79 cases. From that date to 1945 only two years (viz: 1937 with 49 cases and 1942 with 48 cases) had under 50 cases. The last three years 1943-4-5 show little change between them with their 65, 74, and 64 cases respectively. Apart from the notifications we have to consider the distressing morbidity, the infectivity to others in the house, the great danger to infants and the economic loss both to the families and the nation.

I draw the attention of my Council to these remarks and the summaries of the main Public Health aspects of Tuberculosis to increase Education and Public action.

I consider the time ripe for a National Conference to pool all knowledge for the prevention of this disease as it occurs in this country.

There have been 375 notifications of pulmonary Tuberculosis in Blyth since 1938 with 182 deaths giving a death rate of 48.5 per cent. Over these years pulmonary Tuberculosis stands out highest in the percentage deaths of the gross total of all notified infectious diseases. This is not a satisfactory state of affairs. Not only so, but the non-respiratory types of Tuberculosis of such gross notified totals gives a death rate of 37.7 out of 90 cases. Thus during the eight years (1938-1945) 46.4 per cent of the total cases of all forms of Tuberculosis died. After this, pneumonia follows with 34.8 per cent and it is impossible to say how many of these had a prior tubercular infection. Cases of undiagnosed tuberculosis in childhood undoubtedly exist.

7. Maternity:- There were fewer maternity cases in the year under review. The Blyth District Nursing Association attended to 187 cases. There is a great shortage of beds both in Maternity Homes and Hospitals to meet the demand, which is largely due to overcrowded houses, no spare room, absence of home helps, and unsuitable conditions in the houses. Ninety per cent of Maternity cases are normal and Maternity is a physiological act. Most women I am sure would prefer their maternity to be in their own home but are driven - from some of the causes mentioned - to an institution to be treated as patients (which they are not). I have brought this matter of provision of some place locally as a temporary Maternity Home to ease the difficult problem. We have been unable to accommodate many. (50 patients from Sep./45 to Feb./46)

8. Rat Infestation Order:- It is important that there should be continuous action against rat infestation at pits, in sewers, and dwellings, otherwise money spent on spasmadic efforts will largely be wasted.

9. Health Visitors:- The need for an additional Health Visitor has been clearly set forth, and the Ministry of Health has given its support. The existing Health Visitors cannot perform the duties they should. Postponement means loss of infant lives. Being concerned with the progony of future citizens, besides the lives of the future mothers, they are more important than Sanitary Inspectors. Drain-minded people won't see this. Councillors should be electics.

10. Housing:- The number of dwellings over-crowded at the end of the year is 421 (against 353) involving 2540 persons. There was an additional 81 cases of overcrowding above that in last year. There are 2924 families of 2½ to 3 units in each. There are 102 overcrowded families among 338 each of which contain 5½ or 6 units. Of 1129 dwellings in which there should be only 2½ or 3 persons there are 184 of them overcrowded; whilst of 3143 dwellings with permissible number of 4½ and 5 there are 129 of them overcrowded. The percentage of overcrowded are as follows:-

A. For the whole Borough without Council Houses or Slum Clearance areas 3.2%
B. For all Slum Clearance areas 14.9%

C. All Council Houses..............................3.5%
D. For the whole Borough..............................4.5%

the percentage overcrowded are :-

	A	B.	C.	D.	Number Condemned Houses.
Bebside	6.2	11.9	2.3	8.1	335
Croft	5.3	16.1	5.5	6.3	155
Delaval	3.1	15.9	1.3	3.3	69
Plessey	3.3	24.2	3.7	4.7	124
Ridley	1.3	12.7	-	2.2	134
Waterloo	2.6	14.6	-	3.6	144
					961 Total.

(The worst under each heading is underlined).
The total number of Houses for the working classes is 9328 of which 961 or 10.3 per cent are scheduled for Slum Clearance

11. Milk :- 167 samples were taken during the year as follows :-

		Not satisfying test.	T.B. positive.
From producers outside the Borough.	88	40	2 out of 37
" " inside " "	39	13	1
" pasteurised Milk.	31	6	Nil
" " " for phosphatase test.	8	Nil	-
From Heat treated outside the Borough	1	1	
	167		

The Pooled Milk from Stocksfield comes in a Tanker and pumped into a special tank on arrival in late afternoon. Early next morning it passed through the pasteuriser.

12. Mortuary :- The existing one is a disgrace to the Borough and doctors deserve better conditions

13. The Abattoir :- The unsatisfactory state has been brought before the Public Health Committee but the required alterations have been delayed through the delivery of materials.

14. Venereal Disease :- 1. New cases Males : 50, Females : 26.(Sy. only)
2. Total under treatment Males : 24
up to 31/12/45. Females : 58
3. Number of children under treatment up to 31/12/45, Males : 5
Females : 3

15. Maternity Services : For year 1st.April 1945 to 31st.March 1946 : actual to 31st.Dec.1945 : £1281.0.0. and estimated to 31st. March, 1946 : £601.0.0. making a total for the year of £1882.0.0. of which £1404 is for Dilston amd Mona Taylor Homes.

Confinement cases during 1945 were :-
(a) in Homes and Hospitals : 264. (b) by Doctors : 186.
(c) by midwifes : 177. Total : 627.

16. Scabies : There has been a sudden drop in the prevalence of Scabies. It is impossible to say whether the acari (the mites) have heard of ascabiol the atomic bomb, the Labour Government, or the disappearance of dried eggs. (Incidentally we did not allow any suspected cases to avoid ascabiol.)

17. Typhus Fever : We need not fear this being imported from Europe. The Virus is transmitted by the body louse which feeds on man, dies when away from man. The Virus does not penetrate "the nits and so the Larvae are not infected. D.D.T. powder kills adult louse and remains affective in clothes for about two months.. In Scrub Typhus on the other hand, the Virus does penetrate the nits and infects the Larvae and D.D.T. is useless as a preventive as the Larvae and Louse can live on other vermin as well as on jungle grass (hence the name Scrub Typhus.

18. School Work : As I did this work for the Borough Council, I am adding a brief summary of the Medical Inspections. In future the Annual reports go to the County Council.

19. My final appeal is to the Council to hasten with the appointment of Health Visitor to look after the many Mothers and infants and toddlers - to prevent neo-natal and infantile mortality,

SECTION A.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

AREA :- No change in the Borough area took place in 1945, and the acreage remains as formerly at 6,487.

POPULATION :-
(Registrar-General's estimate for year 1945) :- 30,540.
No. of Inhabited Houses, i.e. Holdings :- 9328.

RATEABLE VALUE :- -------------- £167,046.

SUM REPRESENTED BY A PENNY RATE :- --- £638.

EXTRACTS FROM VITAL STATISTICS.

		Against 1944
The Birth Rate per 1,000 population	20.5	-
Death " " " "	12.0	-
Infant Mortality Rate per 1,000 Live Births	61.8	-
Neo-Natal Mortality Rate per 1,000 Live Births (dying in four weeks)	22.8	-
Still Birth Rate per 1,000 Live and Still Births.	20.7	+
Tuberculosis Death Rate.	37.5	-
Maternal Mortality per 1,000 Births	3.1	+

INFECTIOUS DISEASES.	FATALITY RATE.	CASE MORTALITY.
Diphtheria	.09 per 1,000	2.8 per cent
Pneumonia.	.29	25.7
Whooping Couch.	.03	1.3
Scarlet Fever.	.03	1.5

	1943	1944	1945
Number of Births.	604	719	627
" " Deaths.	403	377	367
" " Births in excess of Deaths.	201	342	260

The principle causes of Infant Deaths were as follows :-

Congenital.	4	
Whooping Cough.	1	
Respiratory (Pneumonia 5, Bronchitis 4)	9	-
Prematurity.	7	-
Acute Gastric Enteritis.	9	+
Cellulitis of Nose.	1	-
Encephalitis.	1	+
Spina Bifida Operation.	1	
Inanition.	1	
Suffocation. (Accidental).	1	
Heart Disease (Cardial failure)	1	
Intestinal Obstruction.	1	
Infantile Diarrhea.	1	
TOTAL.	38	

Neo-Natal Deaths (Infants who died within 4 weeks included in the 38). --- 14.

The principle causes of Deaths (of all ages) were as follows :-

	Males	Females.	Total.	Against 1944
Heart & Circulatory.	69	66	135	+
Brain Disease	26	19	45	+
Lung "	11	9	20	+
Kidney. "	5	2	7	+
Bladder "	1	-	1	-
Bowel "	-	1	1	-

The principle causes of Deaths (all ages) were as follows:- (continued).

Infectious Diseases:-	Males.	Females.	Total.	Against 1944 - N -
(a) Diphtheria. 3) -				
(b) Pneumonia. 9) -				
(c) Whooping Cough .1) -				
(d) Scarlet Fever. 1) -				
(e) Acute Polio- 1)	9	7	16.	-
Encephalitis. 2) -				
Cancer.	25	28	53	Same
Tuberculosis:-				
(a) Respiratory	9	9	18	-
(b) Non-Respiratory.	2	2	4	Same.
Violence:-				
(a) Suicide. 3)				
(b) Road Accidents. 1)				
(c) Other causes. 11)	11	4	15	-
Senility.	3	7	10	-
Diarrhea.	1	1	2	+
Diabetes.	2	1	3	
Influenza.	1		1	
Malignant Growths.	1	1	2	-
Child Birth.		1	1	
Other causes.	16	17	33	-
TOTALS.	192	175	367	-

203 of all deathed were in persons 65 yeasrs and over---55% +
38 " " " " among infants under 1 year ----10.4% -

CANCER DEATHS 1945. Situation of Disease.

Site.		Age Group in Years. Under 36	36 to 45	46 to 55	56 to 65	66 to 75	Over 75	Males.	Fe-Males.	Total
DIGESTIVE TRACT.	Pancrees.	-	-	-	-	1	1	1	1	2
	Colon.	-	1	-	3	3	2	3	6	9 -
	Stomach.	-	-	2	2	4	7	11	4	15 +
	Rectum	-	-	-	1	2	1	2	2	4
	Liver.	-	-	-	1	-	-	1	-	1
	Oesophagus	-	-	1	1	1	-	3	-	3-34
RESPIRATORY SYSTEM.	Lung.	-	-	-	-	-	2	-	2	2 - 2
GENITO-URINARY SYSTEM.	Ovary.	-				1			1	1
	Uterus.	-	2			1			3	3
	Prostrate.	-				3		3		3 - 7
OTHER ORGANS.	Breast.		1	2		3			6	6 +
	Bowel Flexure.			1					1	1
	Bowel			1		1		1	1	2
	Generalised.	1							1	1
	TOTAL.	1	4	7	8	20	13	25	28	53

CANCER ACT 1939. Local Authorities attention is specially called to section 2(6) of the Act, and of circular 1813 of May 1939. Grants for treatment are given on approval by the Ministry of Health. Any expenditure by the Council in the provision of treatment for persons suffering from Cancer requires his approval.
Re - M.H. Circular 150/45, has owing to War conditions extended the period during which plans may be submitted until March 31st,1947.
The Yale University of Medicine has issued a report on the admissions for ten years of Cancer to the New Haven Hospital. I am tabulating some of the figures:-

Site	Male Cases.	Female Cases.	Remarks.
Lip & Tongue.	187	15	26 times more in lower than upper lip.
Bladder.	74	18	
Lungs.	198	49	Increasing, but more in Males.
Aesophagus	61	14	

Cancer. continued.

The position as regards Cancer in England and Wales is

(1) In 1930-33 the mortality among professional classes was 83, and among the unskilled 123.

(2) The Influence of economic environment is shown by the fact that the individual is more likely to have cancer of the lip, tongue, mouth, tonsil, jaw, pharynx and the mouth, the greater degree of his poverty.

(3) Annually there are little more than 1½ deaths per 1,000 living.

(4) Age: 87 per 1,000 of the deaths are of the ages of 50 and over. In men the mortality has risen among those under 45 (when usually small) and among those 75 and over.
Among women there has been a greater mortality between the ages of 25 and 35 (due to increase of breast and cancer.

(5) Site. The most frequent site among men now is in the intestines, prostate, pancras, and particularly the lung. In women the increases are in the intestines, ovary, tube and lung. There is a high mortality from Cancer of the Stomach in North Wales and North West England.
In Blyth this year the Stomach sites were double that of 1944, and the Breast cases six against one last year.

SECTION B.

LABORATORY FACILITIES:

Arrangements continue as in previous years.

BACTERIOLOGICAL (County Council Laboratory, Newburn).

(a) Pathological.

				Totals.
(1) Throat, Nose and Ear Swabs:				
Corynebacterium Diphtheria	present.	134		
" "	Not Found.	527	-	661
Virulent C.	present.	32		
" "	Not found.	4	-	36
Haemolytic Streptococci.	present.	6		
" "	Not found.	15	-	21
Vincents.	Not found.	3	-	3
(2) Sputum:-				
B. Tuberculosis.	present	50		
" "	not found.	292	-	342
(3) Urine (Tuberculosis)	not found.	1	-	1
(4) Pleural Fluid.	not found.	1	-	1
(5) Blood (Widal)	No reaction.	1	-	1
(6) Vaginal.	No growth.	1	-	1
(7) Faeces (Pathogenic)				
B. Dysenterial (Flexner)	isolated.	1		
" " (Sonne)	"	12	-	13
No Pathogenic organisims found.		20	-	20

(B) Milk Water, etc.

(1) Water Samples (various courses).			26
(2) Milk Samples:-			
(a) For B. Tuberculosis.	98		
" " " (Samples not analysed through lack of Cavies)	14	-	112
(b) For Methylene Blue.	115		
(c) Pasteurised Milk Bacteria Test.	31		
" " Methylene Blue Test.	3		
(d) Phosphatase Test.	8		
(e) Sterility (Milk Bottles)	11	-	168
Composite Bulk Samples.			
(a) For Methylene Blue.	10	-	10

Chemical. (Public Analysis Laboratory, Newcastle)

Water Samples.	1	-	1

SECTION C.

GENERAL PROVISION OF HEALTH SERVICES.

BLYTH AND DISTRICT NURSING ASSOCIATION.

As in previous years, Matron Scott of the Blyth and District Nursing Association, has provided the following Table which summarises the work done by herself and the Association for the residents in the Blyth Area :--

	Blyth.	New Delaval.	Bebside.
Number of Nurses	7	1	1
Number of Maternity Cases (with doctors)	132	40	14
Number of Midwifery Cases (by midwives	141	21	15
Number of Medical Cases	168	56	23
" " Surgical "	167	42	35
" " Chronic "	35	1	3
TOTAL.	643	160	90
Ante-Natal Visits	2,980	320	233
Post-Natal Visits		76	
Visits to Maternity Cases.		1,184	259
Visits to Surgical Cases.)	12,554	2,045	2,180
Visits to Chronic Cases.)			
Visits to Medical Cases.)			
TOTAL VISITS:	15,534	3,625	26,00

N.B. Total Visits for Blyth & Bebside also include Post-Natal.

TREATMENT OF INFANTS AND PRE-SCHOOL CHILDREN.

Minor Ailments Clinic.

	No. of Cases.	Total Attendances.
Diseases of the Skin:-		
Scabies	2	2
Impetigo	24	73
Eczema	1	2
Others	30	91
Minor Eye Defects:-		
Blepharitis	1	6
Conjunctivitis	23	134
Minor Ear Defects:-		
Otorrhoea	8	19
Others	4	17
Miscellaneous:-		
Minor Injuries, etc.,	25	48
Verminous Heads	3	24
TOTAL	121	416

SUN-RAY CLINIC.

	Between 1 and 5 years.	
	M.	F.
No. of children	18	17
Expectant Mothers		2
Attendances	581	

25 children were treated for the following complaints:-

Rickets	1
Genu Valgum	4
Bronchitis	3
Debility	9
Glands	3
Coryza	4
Asthma	1

In addition to the above, 10 children received Sun-Ray Treatment as a Tonic.

Dental Clinic

	Fillings.	Extractions.	No.of Cases.
Children under 5 years	1	70	29

Ophthalmic Clinic:-

Number of new patients	20
" " old "	26
Spectacles prescribed	32
" not prescribed	19

Throat, Nose and Ear Clinic:-

Operations for removal of Tonsils and Adenoids - 10.

Orthopaedic Defects:-

No case of major Orthopaedic defects in children of this age was reported in 1945.

Scabies Clinic:-

Number of Baths	60
" " Dressings	37
" " New Patients	29
" " Recurrences	1
" " Examinations	29

MATERNITY & CHILD WELFARE SERVICES.

Home Visiting by Health Visitors.

Visits to Infants under 1 year:-		
First visit after notification	653	
Number of re-visits	747	
" " Stillborns visited	23	1423
Visits to children 1 - 5 years		2548
Visits to Expectant Mothers (first visits)		22

Miscellaneous Visits

	First Visits.	Re-visits.	Total.
Puerperal Disease	3	–	3
Ophthalmia Neonatorum	1	Daily treatment at Minor Ailments Clinic.	
TOTALS	4	–	3

Infant Welfare Clinic:-

TABLE A.

No. of Sessions.	First Attendances.	Re-attendances.	First Attendances.	Re- attendances.
	0-1 year	0-1year	1-5 years.	1-5 years.
99	281	2660	28	307

TABLE B.

Total No. of Attendences.	Average No. of Attendances.	Average No. at M.O.s. Sessions.
2967	29.86	4.3

Total number of children under 5 years who attended the Clinic: 381.

Total pre-school children seen in 1945 by the Medical Officer Of Health.

At Toddlers Clinic		138
" Baby "		432
" Immunisation"	(completed immunisation)	812
" " "	(Schick tested)	53
	Total	1435.

The total quantity of milk supplied by the Council at the Clinic to young children, was 3,891 lbs. of Dried Milk.

The following conditions were noted among infants under 1 year of age:-

Congenital Malformations:-

Phimosis	38
Umbilical Hernia	10
Inguinal Hernia	7
Rickets	3
Talipes	1
Congenital Injury	1
Hare Lip	1
Cleft Palate	1

Diseases of the Digestive System:-

Feeding Dyspepsia	12
Vomitting and Diarrhoea	11
Stomatitis	5
Constipation	11

Diseases of the Respiratory System:-

Coryza	4
Bronchitis and Bronchial Catarrh	15

Diseases of the Skin:-

Infantile Eczema	2
Impetigo	9
Dermatitis	1
Other Sores	5

Diseases of the Eye:-

Conjunctivitis	12
Blepharitis	1
Ophthalmia Neonatorum	4

Diseases of the Throat, Nose, and Ear:-

Squint	2
Otorrhoea	7
Otitis	1

Other Diseases:-

Cyst	1
Tongue Tie	4
Naevi	5
Thrush	1

Toddlers Clinic:-

Special Sessions were held, when necessary, for children between the ages of 2 and 5 years:-

No. of Sessions.	Average Attendances.	Examinations by M.O.	Total Attendances.
12	11.7	139	139

At these Sessions, the following conditions were found.

Congential Mal formations.-

Heart Disease	1
Umbilical Hernia	2

Diseases of the Respiratory Tract:-

Bronchitis and Bronchial Catarrh	11
Dental Defects	6

Diseases of the Skin:-

Urticaria	1
Impetigo	3

Diseases of the Eye:-

Squint	1

Diseases of the Throat, Nose, and Ear:-

Enlarged Tonsils and Adenoids	14
Otorrhoea	1
Cervical Glands	2

Other Diseases:-

Talipes	2
Pes Planus	6
Genu Valgum	8
Hydrocele	1
Enurises	1
Arthritis	1
Alopecia	1
Mentally Defective	1

Vitamin Product Scheme:-

The above scheme was still in operation during 1945, at the following Centres:-

Ante-Natal Clinic, Beulah House.
Municipal " " "
Bebside Senior School.
Newsham Junior "
Seaton Sluice (Sessions held fortnightly.)

Attendances reached the following figures for 1945:-

Ante-Natal Clinic	Municipal Clinic.	Bebside.	Newsham.	Seaton Sluice.
1989	705	468	1474	152

Much of the Vitamin Product is now issued at the Food Office.

Child Life Protection.

Under Section 206/220, Public Health Act, 1936, four persons were receiving three children for reward at the end of the year. The Health Visitors reported that the children were well cared for in satisfactory homes.

Infectious Diseases in Children under 5 years of age:-

	No. of cases notified.	Against 1944.
Diphtheria.	11	–
Scarlet Fever.	24	–
Measles.	46	–
Whooping Cough.	67	–
Pneumonia.	8	+
Tuberculosis (Pul.)	2	+
E.C.S.M.	4	+
Opth. Neonatorum	3	+
Dysentery.	5	+
Total	170	–

Health Visitors paid visits to 146 cases of Infectious Diseases

Maternity Services.

Number of patients who were confined in 1945 were as follows:-

	Free.	Assisted.	Paid own Fees.	Total.
Dilston Hall Maternity Hospital.	63	31	3	97
Preston Road " "	19	6	22	47
Princess Mary " "	2	1	38	41
Mona Taylor " "	7	5	47	59
Willington Quay" "	–	–	11	11
Stagshaw " "	–	–	2	2
Ravensbourne " "	–	–	2	2
Andrew Laing " "	–	–	2	2
Gilsland " "	–	–	1	1
Gateshead " "	–	–	2	2
Totals:	91	43	130	264.

Maternity Outfits.

Bags were loaned out 10 times during the year.

Puerperal Pyrexia.

Total Cases notified...........3

Ophthalmia Neonatorum.

Total Cases notified............3

DENTAL TREATMENT.

No. of Mothers.	Extractions.	Local Anaesthetics.	Dentures Supplied.
21	208	All	4

Ante-Natal Clinic.

Total Sessions	98
" Attendances	2758
Number of new patients.	544
" " old "	2214
Average attendance	28.14
Number of Examinations by Doctor	2448
" " Wasserman Tests.	395

Maternal Deaths.

There were 2 Maternal Deaths during the year.
One of the deaths took place at Dilston Hall Maternity Home.

Women's Advisory Clinic.

The following is an extract from a report for which I am indepted to Nurse Finley.

Total Sessions	10
" Attendances	112
Number of New Patients	38
Patients attending for Post-Natal Treatment	21
" " " Contraceptive Advice	28
" " " Sterility	7
Return Visits.	66

Maternal Mortality - Annual Report.

Year.	Puerperal Sepsis.		Other Puerperal Causes.				
	Deaths.	Rates per 1,000 Births.	Deaths.	Rates per 1,000 Births.	Total Deaths.	Rates per 1,000 Births.	Total Births Live and Still.
1938	1	1.6	4	6.6	5	7.4	605
1939	Nil	Nil	Nil	Nil	Nil	Nil	606
1940	2	3.3	2	3.3	4	6.6	573
1941	Nil	Nil	5	7.8	5	7.8	573
1942	2	3.5	2	3.5	4	7.0	539
1943	Nil	Nil	3	4.8	3	4.8	604
1944	Nil	Nil	Nil	Nil	Nil	Nil	719
1945	Nil	Nil	2	3.2	2	3.2	627

INFANT WELFARE.

In the proper attention of babies - by Health Visitors lies the future foundation of the National Health. Already, entrants at Schools have shown the value of Infant Welfare - there is a better standard of health. Among entrants at schools this last year, there were only two bad cases of deficient nutrition. Along with this there was the special priority of food necessary for Mothers and Babies, as determined by the Minister of Food. The supply of these (Milk, orange juice, castor oil with vitamin and ferrous sulphate tablets where necessary), should be part of an armoury in preventive medicine. National Dried Milk is given out by the Food Office, (not through Clinic.) The Home environment plays a most important part in the reaction of every child, and here the Health Visitor can achieve great improvement and help in the prevention of future anti-Social behaviours. Nasal and Respiratory infections take place inside rooms, and much timely advice can prevent their development in the young.

Babies Born in Hospital.

Particulars of those born in the area of Blyth.

Premature Infants:-

(1) a. Total number born at home - 10
b. " " " " Hospital. - 7
(2) The number born at home.
a, Nursed entirely at home - 8
b. Who died during first 24 hours - 2 (Still-born, 2.)
c. Who survived at the end of one month - 6
(3) Number of those born in hospital - 9
a. Who died during first 24 hours - 2
b. Who survived at the end of one month - 6
1 lived 48 hours.

INFANT MORTALITY.

	A Female births (Live)	B Female Child deaths. Under 1 yr.	C All Female deaths All ages.
1934	275	16	170
5	308	21	199
6	286	23	189
7	272	17	204
8	284	20	202
9	288	14	165
1940	271	19	171
1	216	22	166
2	247	9	171
3	267	17	185
4	353	18	156
5	297	20	175
Totals.	3364	216	2153

A. 1934 - 1938......Registrar General's figures.
1939 - 1941........ Local Registrar's returns.
1942 - 1943........ Registrar General's returns.
1944 - 1945 ....Departmental Returns.

B. 1939 - 1941........The total Infant only.

Infant mortality decreased in proportion to the amount paid in rent. This was proved in the U.S.A. In homes with two or more persons per room the infant mortality was 2½ times than in homes with less than one person per room. Overcrowding is not simply related to persons per room, but also overcrowding of buildings in the area whereby there is lack of air space all around. The lot of the slum dweller is ill health and higher mortality from squalor, cold, bad feeding,etc; and the absence of knowledge of hygiene given by Health Visitors from insufficient number of these. Our future generation demands better consideration.

Stockton-on-Tees lesson. 152 families, and 710 individuals were moved from a slum area to a new housing estate, leaving 289 families and 1928 individuals in the slum area.

	Record for five years before removal were;-	For five years after removal people who were rehoused.
General Death Rate	12.32	12.07
Demolished area Death Rate	22.91	33.55
Undemolished ditto.	26.10	22.78

Cause :- Rentals in demolished area was 4/8d per family per week.
" " per new houses 9/- " " " "

Incomes of rehoused ranged...47/1d to 30/5d, and those left in slums 44/7d to 30/9d. Those in new houses thus paid in rent 25 % of their income, while those left in slums only 17% . Whilst Mothers were able to give breast feeds the infant mortality fell in the new houses, but the death rate of children between 1 - 10 years increased 9.2 per cent.

RATES.

Two thirds of rate revenue comes from rates on houses and of this amount 70 per cent come from those who are classed in the lower income groups (i.e. those with incomes up to £250 per annum). Thus these people suffer greater hardship by this than any other tax. These people have a just claim for either a Government Grant under their local Authority, or equalisation of rates between areas.

Mortality of Legitimate infants according to the Social Status of Fathers - England and Wales, 1930 - 1932.

Rates per 100,000. births	32.7	45.0	57.6	66.8	77.1
Class	1	2	3	4	5

Class 1 - Upper Professional & Manergerial Satus. Class 2 Lower Employees Manager & Professionals. (3) Skilled and Black-coated workers. (4) semi-skilled including agricultural workers. (5) Unskilled labourers.

HEALTH VISITING SERVICES.

Year.	First Visits to Infants.	Re-Visits to Infants under 1 yr.	Visits to children 1-5 years.	Ante-Natal Visits. First Visits.	Ante-Natal Visits. Re-Visits.
1940	510	1652	1825	88	
1941	745	870	1689	87	
1942	459	1040	2140	50	
1943	469	984	2280	43	
1944	664	1318	2620	19	
1945	653	747	2548	22	

NOTIFICATION & REGISTRATION OF BIRTHS.

Year.	Notified Births. Live.	Still.	Total.
1940	552		
1941	573	19	592
1942	539	15	554
1943	604	13	617
1944	719	13	732
1945	628	23	651

LAWS FOR THE PROTECTION OF CHILDREN.

Foster Children are protected by the Infant Life Protection Act of 1892, and its amendment affords protection to children up to nine years of age. The Public Health Act 1936 re-enacts prior legislation and throws responsibility on Maternity and Child Welfare committees of appointing child life protection visitors, (these duties are carried out by Health visitors.) (The above law does not apply to children boarded out by the Public Assistance Board.)

Infant Welfare. Though Sanitary reforms of the last century brought down the general death rate, yet the Infant Mortality did not fall showing there were other factors to be considered and new measures required. A conference in June 1906 stimulated the formation of Maternity and Child Welfare centres. The first step in the appointment of Health Visitors was in 1892 when they were appointed by the Buckingham County Council on the advocation by Florence Nightingale. Both the notification of Births Act of 1907 and that of 1915 aided these appointments and from 1910 Women Sanitary Inspectors proved their worth in the cause of this Welfare work. This led in 1919 to the qualifications of Health Visitors being laid down. Every Health Visitor now must hold a Health Visitors certificate of the Royal Sanitary Institute (6 months - soon to be nine months course;) full General or Childrens' Hospital training, State Certificate, Midwife Certificate Part 1 (six months.) Alternatively the H.V. Certificate can be taken after two years training for such, S.C.M. Certificate 18 months, and at least 6 months in a Hospital. Thus there is a wide sphere of action concerning the Hygiene of the Home, the Mother, the child, besides the parental influences and the sanitary environments - all influencing the developement and well-being of the future generation. Health Visitors are in duty bound to report directly to the Medical Officer of Health any environmental influence inimical to the welfare of the child.

TUBERCULOSIS.

The havoc made of a large number of lives by a preventable disease demands the attention of all local Authorities; and to become aware of some of the general manifestations of the disease and the measures of control which these indicate, there is need for a greater knowledge by the public in order to stimulate them to create, on factual basis, an opinion for strong measures for the prevention and treatment of the disease. I make no apology for creating an educative opinion on this scourge as I do not consider the Public Health aspects of the subject should be locked up as a secret of the heart, as I think the time is ripe for a greater national effort in the measures by public education on a national blot.

The important form of Tuberculosis of to-day is the Progressive destruction type of Pulmonary Tuberculosis of adults. It has created the serious socio-economic problem we have to counter. The Tubercle Baccilli belong to the class of bacilli known as Myo-bacterium, and according to the degree of Pathogenicity are classed as follows:-

(1) Saprophytes - Not Pathgenic for any known animal.
(2) Tubercle Bacilli - Pathogenic to certain cold-blooded animals.
(3) Avian Tubercle. - Pathogenic mainly for birds.
(4) Bovine Tubercle - Pathogenic for cattle and some other animals. (Guinea Pigs, Rabbits, Swine.)
(5) Human Tubercle - Pathogenic to man - the type most found in man. Avian infection in man is of extreme rarity. Tuberculosis in Swine however, is curiously of the Avian type. Tests on the Guinea Pig is the most important guide to Tuberculosis.

The Bovine type of Bacilli is different from the human. The Bovine type develops slowly (dysgonic) on suitable medium, and there is no increase in the final acidity produced. The human type develops vigorously (Eugonic), and the final acid reaction is much increased. The phenonena are known as the 'Theobald Smith Curve'. (Some strains do not keepto this rule). One type cannot be transferred into another type. The Rabbit is the most important animal to distinguish between the Human and the Bovine types. A small injection (0.01.Mg) of Bovine Bacilli kills a rabbit in 6 - 8 weeks, whilst the same dose of human type produces only a few Tubercles. (mainly kidneys)

Man is susceptible to the Bovine type, chiefly through milk by infection through the intestines - mainly in children (cervical glands) through decayed teeth.

Chemical Composition of Tubercle Bacilli. There is a high Lipin content (Lipin includes the entire group of fats and Lipoids). The acetone soluble fats contain substances giving the aromatic odour of cultures of Tubercle Bacilli. They also contain a yellow pigment (Phthiocol) which has the activity of Vitamin K. The Bacilli has also been known to contain Riboflavin (Vitamin B1). For growth it requires Carbon, Nitrogen, Hydrogen, Oxygen, Phosphorus, Potasium and Magnesium. The carbon in artificial media is got from Glycerol. In absence of Glycerol, respiration but not growth can be maintained by Sodium Lactate, Sodium Salts of fatty acids, caseous material or blood. Oxygen is necessary for its respiration and complete deprivation of Oxygen for four days kills it. Moisture and temperature of the range of the animal body are requirements. Both human and bovine Tubercle bacilli have great resisting powers against bactericidal agents even when deprived of food for long periods provided they have Oxygen. The bacilli live on the host & produces a chronic disease.

The Lungs contain one of the largest systems of Lymphated channels and Glands (which can be regarded as the body's drainage system) and so Tuberculosis can be regarded as a disease of the lymphatic system.

Forty per cent of cattle in this country react to Tuberculosis.

What happens with the invasion of the Tubercle Bacilli at any part? First there is some primary damage - it may even be death (necrosis) of the cells. This gives rise to exudation, i.e. cells and plasm. invading the normal tissue around. On this follows production of a new tissue - granulation tissue - a response of nature to 'wall in' the invaders. We thus get a small Tumour (i.e. swelling) called a Tubercle. These three changes are the fundamentals of inflamation. Caseation (cheesy-like matter) may be followed by fibrosis, liquifaction, or be calcified (lime deposition) - but even a calcified area may contain live tubercle bacilli and therefore be a horrible source of future spread. If the part liquifies it leads to the formation of cavities, and the pus from it is thrown out as sputum. Unopened cold abscesses show that this breakdown (liquifaction) is not dependent on other germs, and that the Tubercle bacilli may be a pus producer. In typical lesions characteristic giant cells are found, but it is rare to find Tubercle-bacilli in them. A caseated Tubercle may be indistinguishable from a caseated encapsuled pneumonic focus; but in the latter the elastic fibres are nowmally situated, whereas the Tubercle does not contain any of the fibres, these having been pushed aside.

It does not follow that a strain of Tubercle Bacilli which is highly virulent in the rabbit will be highly virulent in man. (We cannot test their virulence in man). The ideal way of healing is resorption with fibrosis whilst extensive caseation with cavity production is the most dangerous.

Generally speaking there are three kinds of cavities, viz:- without a wall, with a thin wall (used for collapse therapy) and the old thick wall of 'chronic' cases with little tendency to heal. Few cavities capable of healing now-a-days are left without collapse therapy. Without collapse therapy it has been stated that within two years of formation more than half of them died, and within five years the great majority. A minority have survived 10 - 20 years. Cavities heal by obliteration or shrinkage, or open healing, each method leaving a scar. First infections invariably lead to gross infection of the lymphatic glands of the region; reinfection as a rule does not. Koch made the observation that reinfecting bacilli remain in clumps at the site of infection for a long time. Tuberculosis of reinfection always takes a chronic course (Calmette). The localisation of reinfection is a significant manifestation of immunity. But it may ulcerate and so give exit to bacilli, and so be a mechanism of protection against further invasion. In the lung its potentiality for evil is due to its site.

There are two types of Hypersensitive reactions (allergic) of the body: (1) The immediate one as occurs in Serum or pollen, Hypersensitiveness giving Anaphylactic shock with fall of temperature, and (2) Tuberculin type reaction caused by bacillary bodies alive or dead capable of causing Tuberculosis tissue change with a rise of temperature. In the former the 'Antibody' is in the Serum, and in the latter in the Cells. All Antibodies are cellular products, and so long as they are fixed in the cells you get the Tuberculin-type of sensitivity, but when thrown into the blood stream you get Anaplyeaxis. Human phthisis is a reinfection Tuberculosis, because man does not in the majority of cases become Tubercular with small doses of the bacilli.

Healed or latent Tuberculosis, as in man, never occurs in laboratory animals in which the disease progresses, Phthisis is the most frequent fatal form of Tuberculosis. The organ is destroyed in its fight to prevent spread. It is 'Koch Phenonema' in the lungs, (i.e. the local tissue dies to prevent dissemmation), constantly repeated as the dead material is partly removed, and partly reinfect another part.

B.G.G. (bacillus Calmette-Guerin) Vaccine was developed from a bovine bacillus in 1908, and after 13 years of 230 transplantations the strain lost the property of causing reinoculable Tubercles, and at giving immunity. Final judgment cannot be given owing to insufficient number of cases watched over long periods, but it appears to give promising results.

Tuberculin was brought before the world by Koch in 1890. It was a 50% Glycrol extract of pure Cultures of Tubercle bacilli. The active principle is said to be a Protein. The purest Tuberculin now available is purified protein Derrivative. Old Tuberculin of Koch has no primary toxicity; this means in a normal man or animal it produces no reaction. But non-denatured Tubercle-proteins do produce anti-bodies.

Practical application of Tuberculin is that it makes possible to distinguish between infected and non-infected beings, because only the former react to an injection into the skin. (A few chronic and miliary forms do not react.) The reaction indicates that the person has been infected with Tubercle bacilli. It does not follow that he has Clinical Tuberculosis. To diagnose disease X Rays are necessary. The function of Tuberculin test is to rule out Tuberculous disease. The value of the test increases with decreasing age of the patient. Whilst children react rarely, yet a positive reaction below five years means a recent infection and often potentially active disease. Except in infants the positive reaction does not mean Clinical Tuberculosis.

The conversion from Tuberculin negative - Tuberculin-positive, means that the first infection has occurred, and all that could be done at this stage is a full Hygenic life with high living and ample rest. Tuberculin for diagnose is used in three ways:-

(1) Pirquets Cuteneous test.
(2) The Patch Test.
(3) Intracutaneres injection (Mantou test).

Phthisis. In the great majority the primary infection is in the lung as a small pnuemonic Lesion which undergoes caseation and becomes surrounded by hard tissue, and, in most, the lymphatic nodes of this area is likewise affected. The period between this primary infection and the actual development of Phthisis may be years. Foci that appear calcified by X Rays are often partly calcified and partly caseated or liquified. Tuberculous Lesions which are caseated are extremely slow and uncertain in healing. But once well advanced in healing it hardly becomes a source of clinical disease. Johnson's studies (showing Nitrogen retention and calcium) suggest the onset of menstruation made girls more vulnerable. Experiments on animals have proved the value of Vitamins - particularly Vitamin C - in preventing intestinal and possibly Laryngeal Tuberculosis.

Tuberculosis is more frequent in diabetics (Diabetis Mellitus), and is more progressive and destructive in them.

Another condition with a high tuberculosis death rate is Silicosis. Calcification of primary infections are in the majority of cases probably sterile (it has been stated that more than 20 - 25 per cent contain viable tubercle bacilli).

No one can say which primary lesions will regress or progress. The three diagnostic criteria of activity are:- (1) X-Ray changes in the lesions. (2) Symptons referable to Tuberculosis and (3) finding Tubercle bacilli in the Sputum or gastric contents.

For the Tuberculosis patient to be successfully treated it is necessary to have early and correct diagnosis. Too many cases are found out too late owing to (1) absence of symptons. (2) failure to make early correct diagnosis. (3) failure to have early X-Rays. (4) Too much reliance by the Public that a chronic cough, loss of weight and sweats are necessary for the diagnosis.

Suspicion of Tuberculosis may arise from being easily fatigued, poor appetite, and chronic enaemic state, weight loss without obvious cause, then in all these an X-Ray may disclose a focus. If a focus in the lung is detected by X-Ray it means, especially in the upper part of the body, in a person under 40 years of age, that Tuberculosis must be excluded. Local Authorities should give free X-Ray examinations to all unable to pay for it. The finding of Tubercle Sputum establishes both the diagnosis, and the existence of active disease. It may also be found in Gastric Livage. There may be absence in Sputum, and found in the washing of the Stomach (Gastric Lavage). The Leison may be active and for a long time no T.B. found.

The aim of Collapse Therapy is to render the Sputum and Gastric contents free of Tubercle bacilli. Positive proof of the existence of Tubercle Bacilli is by finding them in Sputum and Gastric contents by certain staining methods, by cultures, and inoculations in the Guinea Pig and recovering them from their organs. Patients who have no symptoms have no sputum, and these cases spread by the blood (including Miliary Tuberculosis) for long periods have no sputum.

Tuberculosis in children can occur as slow healing, primary infection - even extensive - without showing, definite radiological pictures other than that of enlarged hilar glands and irregular striations. Opinions differ as to the removal of these cases to Institutions, but as these cases constitute a grave Clinical and Social problem there is an urgent call on Tuberculosis Officers to decide, along with Medical Officers of Health both these aspects, as well as their infectivity. It may be that the early stage gives rise to no definite symptoms nor signs in the chest, and only an X-Ray or a Tuberculosis test discloses the diagnosis; and it is in this early stage that the most hopeful results will accrue. Without symptoms they are non infective and could go to special homes.

The situation is menacing, since we have now come to regard Adult Tuberculosis as only a 'continuous but insidious growth of the initial lung region' (Brieger 1944) i.e. of primary infection from contact. Adult tuberculosis is a serious danger to any child. Those in charge of children should be thoroughly examined, and this applies to teachers and nurses at Nurseries for children. WALLGREN'S (1941) figures on martality among children are 37 per cent under one year, 16 per cent between one and three years; 4 per cent between three and seven years; and about 1 per cent of those between seven and sixteen years of age.

Of 4,000 Glasgow children, Professor Fleming found that the number of children infected rose rapidly with each age group - from 9.3% for those in age group 0-4, up to 44.8% for the age group of 10-15. Again, D'Arcy Hart found 50% reacted positively at 12, and 70% at the age of 20. These figures are impressive, and point to the necessity of early removal of Infected Tuberculous children to Sanatorium or Papworth Homes, as they have an excellent opportunity for recovery.

The child of a Tuberculosis parent is exposed dangerously to risk of death from Tuberculous Meningitis in the early years of life. With Infection during the first three months of life the mortality varies from 18 to 100% (according to district and degree of exposure); and therefore it is a bounden public health duty to remove the child at the earliest from continued infection.

Mass Radiography has shown us a means of detecting early cases of Tuberculosis without any symptoms. But most of the public exaggerate the certainty of its aid as obviously with such an insidious foe the X Ray may pass a person fit whilst in a few months he may show active mischief. About ten cases out of every thousand require re-examination, and about half of those need some treatment. Even so, it is a lucky chance now for early Sanatorium residence to be given owing to the diminished number of beds and Staff. The majority of Tuberculosis cases live at home, and on Health Visitors they must rely to teach them the necessary Hygiene to prevent its spread, to advise all contacts as to the required ventilation and disinfection. The new Disabled Persons (Employment) Act gives him a special chance through the Employment Exchange of finding a suitable job.

THE TUBERCULOSIS PROBLEM.

The factors involved are :-

(1) The Patient. early diagnosis. Mass Radiography - tests, (Mantoux Patch etc,) Tuberculosis Dispensary.

(2) The suspected or early stage - Sanatorium. These entirely for them, and no one with a temperature over normal to be in a Sanatorium. Staff for each - each to have a Laboratory.

(3) Hospital Case. Adequate beds in separate rooms. Prevention of cross infection. This requires staff of (a) Doctors. (b) Specialists. (c) Matron &

Nurses. (d) Domestic Staff. (e) Own garden of vegetables. (f) Tubercular-tested pasteurised milk.

(4) (After care) Committees which should also deal with the welfare of the families of those in hospital, and family allowance during Hospital duration for all cases.

(5) Rehabilitation and Employment Centres (or Villages).

(6) Disinfection of all rooms where T.B. Cases have been.

(7) Auxilliary measures. Notifications, preventive measures at Farms and Dairies. Tuberculosis-tested Milk and Pasteurisation.

The Papworth Principle of Planned Housing, adequate food, re-habilitation, and education of the people affords the best hope till a greater attack against the disease - preventive in all its aspects is fully established.

Preventive measures.

A. The Patient.

(a) Early Case. - Sanatorium. No case in a Sanatorium with a temperature above 99.F.

(b) Acute Case. - Special Hospital Wards, or special room in a house for separation from others.

(c) Chronic Case.- As for (b) according to circumstances

B. Contacts. Compulsory X-Rays and measures according to advice. Observation - six monthly for two years.

C. House. (1) Room used by patient to be disinfected, wall repapered or repainted as the case may be, and any room where T.B. case existed.

(2) No house to be let or sold without the local Authorities being informed, so that disinfection may be carried out.

D. For diagnosis and Treatment. Free Pathological X-Rays consultation, and all Hospital treatment payable by the County Councils.

E. Cattle (1) Tuberculin testings. (2) More ventilation of Cowsheds. (3) Complete separation of each animal in sheds so that breathing on to each other is prevented. (4) More frequent removal of dung from sheds, and not in close proximity to Milking Byre. (5) No Milking in sheds, but in special tiled-walled shed for the purpose. (6) Special measures on cleaning milk machines (7) Sterilizing Plant at Farms. (8) Vetimary Inspector. (9) Sanitary Inspector.

F. Milk. (1) All Milk to be pasteurised, or, if not at the farm, then within six hours of leaving it. (2) T.B. Milk to be pasteurised. (3) All stored milk at a depot to be in a Refrigerator or Cool Room. (Delivery Milk Vans must be protected against Sun Rays.

G. Bottles Regulations as to Sterilization and cleanliness of the Dairy and Farms to be strictly enforced.

H. Legal. Medical Officer of Health to have power to stop the sale of milk found to contain Tubercle Bacilli.

Auxiliary Measures.

'Tuberculin Tested' Milk.

The Tuberculosis (attested herds) Scheme of 1937.

The Food & Drugs Act - 1938. Section 25.

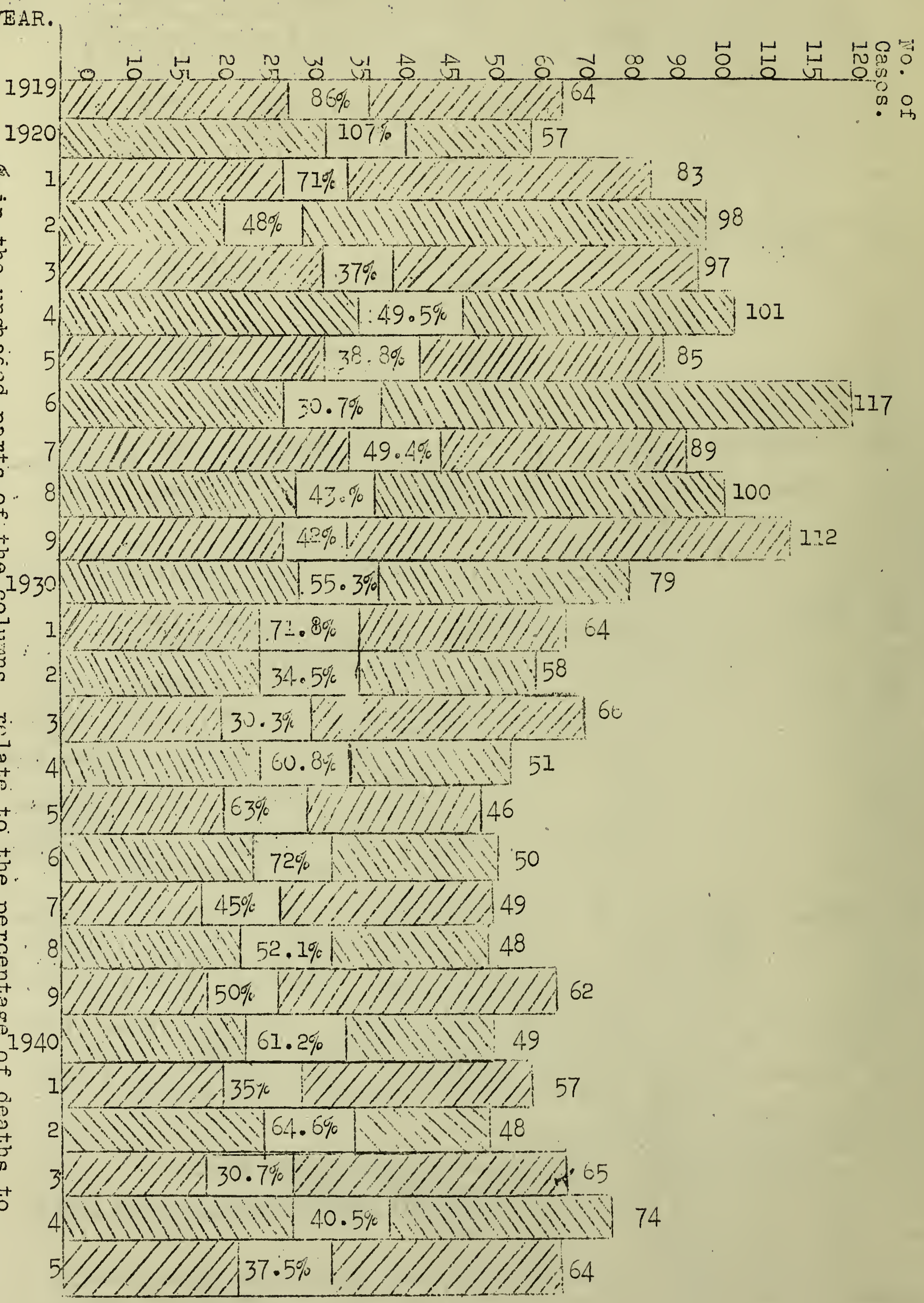
Public Health (Prevention of Tuberculosis) Regulations 1925.

The Milk and Dairies Order 1926.

The Tuberculosis Order 1938.

It is not so well known that dogs and cats among Tuberculosis persons can acquire Pulmonary Tuberculosis. You cannot rear a Tuberculosis-free breed if children are born and exposed to Sputum positive cases among families. If you can prevent a Tuberculosis Milieu developing in a house where a child is born you must obviously remove the possibility of infection. Papworth Village. Of 77 children born in the village none developed active Tuberculosis. In Papworth Village the daughters of T.B. cases could marry and beget normal children. Flugge showed that sputum-positive cases may infect 23 % of the members of their families by sleeping with them if they were advanced cases with much Catarrh. Where sputum-positive cases had no catarrh the infection was only 1 per cent.

TUBERCULOSIS IN BLYTH. 1919-1945.



% in the unshaded parts of the columns, relate to the percentage of deaths to notifications.(C.D. Rate.)

TUBERCULOSIS

Statement of Tuberculosis Cases - 1945 (As per Register)

	MALES		FEMALES		
	Pul.	Non-Pul.	Pul.	Non-Pul.	TOTAL.
(a) Number of cases of Tuberculosis on Register at commencement of year	101	28	96	22	247
(b) Number of new cases notified under the "Regulations of 1930, for the first time during the year.	35	4	21	4	64
(c) Number of cases removed from the Register during the year.	24	7	21	5	57
(d) Number of cases remaining on the Register at the end of the year.	112	25	96	21	254

TUBERCULOSIS - 1945

Summary of information extracted from Records Dept., relating to cases removed from the Tuberculosis Register of the Borough during 1945

	PULMONARY.		NON-PULMONARY		GRAND TOTAL
	Males.	Females	Males.	Females.	
DEATHS.	16	9	1	Nil.	
Total	19		1		20
RECOVERED	1	1	6	1	
Total	2		7		9
REMOVED FROM DISTRICT	13	5	5	4	
Total	18		9		27
REMOVED FROM REGISTER AS AGREED TO BY MEDICAL PRACTITIONERS.	Nil.	Nil.	1	Nil.	
Total	Nil		1		1
					57

TUBERCULOSIS. - 1945.

Age Groups.	New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1	-	-	-	-	-	-	-	1*
1-5	2	-	-	-	1	-	-	-
5-15	4	4	1	1	-	3*	1	1*
15-25	10	12	-	1	2	6	1	
25-35	8	4	2	1	1	1		
35-45	4	1	1	1	2	-		
45-55	5	-	-	-	3	-		
55-65	2	-	-	-	1	-		
Over 65	-	-	-	-	1*	-		
Totals	35	21	4	4	10	10	2	2
Grand Totals	56		8		20		4	

* = Non-notified as T.B. Cases = 4 Deaths.

t

TUBERCULOSIS - 1944 and 1945

1944

	NOTIFICATIONS				DEATHS			
	Males.		Females.		Males.		Females.	
	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.
Quarter Ending 31st.March,1944.	5	3	6	Nil.	1	1	1	Nil.
Quarter Ending 30th. June,1944.	5	4	7	3	11*	Nil.	3	Nil.
Quarter Ending 30th.Sept.1944	7	4	8	1	2	1	4	1
Quarter Ending 31st.Dec.1944.	11	1	8	1	2*	Nil.	2	1
Totals	28	12	29	5	16	2	10	2
Totals	40		34		18		12	
Grand Totals	74				30			

* Includes Non-notified T.B. Cases = 2 Deaths.

1945

	NOTIFICATIONS				DEATHS.			
	Males,		Females.		Males.		Females,	
	Pul.	Non-Pul.	Pul.	Non-Pul	Pul.	Non-Pul.	Pul.	Non-Pul.
Quarter Ending 31st.March,1945	4	-	2	-	3*	-	2*	-
Quarter Ending 30th.June,1945	18	1	9	2	3	-	3	-
Quarter Ending 30th.Sept.1945	7	3	5	1	1	-	2	2*
Quarter Ending 31st.Dec.1945	6	-	5	1	3	2	3	-
Totals	35	4	21	4	10	2	10	2
Totals	39		25		12		12	
Grand Totals	64				24			

* Includes Non-notified T.B. Cases = 4 Deaths.

Mortality figures for Tuberculosis (All Forms) per 100,000 population

Year.	England & Wales.	Year.	Blyth.
1919	126.0	1939	101.0
1920	113.0	1940	114.0
1925	104.0	1941	65.0
1929	96.0	1942	98.0
		1943	65.0
		1944	98.0
		1945	78.0

Tuberculosis Notifications 1938-1945.

Year.	Respiratory.	Non- Respiratory	Total Notifications.
1938	38	10	48
1939	47	15	62
1940	38	11	49
1941	44	13	57
1942	38	8	44
1943	57	8	65
1944	57	17	74
1945	56	8	64

TUBERCULOSIS 1945.

Ward distribution of Notifications and Deaths.

Ward	Notifications	Deaths.
Bebside	4	1
Croft	13	4
Delaval	9	3
Plessey	23	10
Ridley	6	3
Waterloo	9	3
Totals	64	24

TUBERCULOSIS 1919 - 1945.

	All forms of Tuberculosis. Notifications Per Year.	No. of Deaths per Year.		Percentage of Deaths to Notifications (	Death Rate per 1,000 population
1919	64	54 deaths	=	86.0%	
1920	57	61 "	=	107.0%	
1921	83	59 "	=	71.0%	
1922	98	47 "	=	48.0%	
1923	97	36 "	=	37.0%	
1924	101	50 "	=	49.5%	
1925	85	33 "	=	38.8%	
1926	117	36 "	=	30.7%	
1927	89	44 "	=	49.4%	
1928	100	43 "	=	43.0%	
1929	112	47 "	=	42.0%	
1930	79	42 "	=	55.3%	
1931	64	46 "	=	71.8%	
1932	58	20 "	=	34.5%	
1933	66	20 "	=	30.3%	
1934	51	31 "	=	60.8%	
1935	46	29 "	=	63.0%	
1936	50	36 "	=	72.0%	
1937	49	22 "	=	45.0%	
1938	48	25 "	=	52.1%	0.7
1939	62	31 "	=	50.0%	1.0
1940	49	30 "	=	61.2%	1.1.
1941	57	20 "	=	35.0%	0.6
1942	48	31 "	=	64.0%	0.9
1943	65	20 "	=	30.7%	0.6
1944	74	30 "	=	40.5%	0.9
1945	64	24 "	=	37.5%	0.7

DIPHTHERIA.

	Cases.	Deaths.	Remarks.
1941	300	20	Not Immunised.
1942	145	5	" "
1943	98	3	" "
1944	116	6	" "
1945	108	3	1 Immunised (December, 1942.)

ANNUAL RETURNS FOR FOUR YEARS OF NOTIFIED CASES OF INFECTIOUS DISEASES.

Year.	Scarlet Fever.	Diphtheria.	Erysipelas.	Pneumonia.	Puerperal Pyrexia	Cerebro Spinal Fever.	Dysentery.	Ophthalmia Neonatorum	Tuberculosis, Pul.	Tuberculosis, Other.	Whooping Cough.	Measles.	Malaria.	Para. Typhoid Fever.
1942	65	145	7	55	4	3	1	5	38	8	79	91	–	–
1943	123	98	13	82	6	1	4	2	57	8	90	80	–	–
1944	116	116	12	39	3	1	2	–	57	17	156	723	–	–
1945	69	108	6	35	3	9	10	3	56	8	79	87	1	1

DIPHTHERIA IMMUNISATION.
Year Ended 31st. December, 1945.

	Under 5 years.		5 -15 years.	Total.
Total number of children immunised at end of previous year.	1560		4232	
Add. Immunised at Clinic	573		167	
" by Private Doctors or by adjoining authorities.	65		28	
Immunised away and moved into Blyth.				
	2198		4427	6625
		Add: Children now 5 years old.	607	
			5934	
Deduct: Children now 5 years old.	607	Deduct: Those over 15yrs.	481	
Total at end of year.	1591		4553	6144
Children completely re-immunised during the year.	20		61	81

SUMMARY OF DIPHTHERIA AMONG THE IMMUNISED IN 1945.

Period Elapsed.	No. of Cases.	
Up to 6 Months	2	
6 months to 1 year	1	
1 year to 2 years.	10	46 with over 2 - 5 years from date of immunisation.
2 years " 3 years.	15	
3 " " 4 "	14	
4 " " 5 "	6	
5 " " 6 "	1	
6 " " 7 "		
7 " " 8 "	2	
8 " " 9 "		
9 " "10 "	1	
No record of date of immunisation	6	
Total	58	

Thus from two years onwards protection was lost, showing necessity for Schick testing.

DIPHTHERIA. –
Monthly Incidence.

	1943.	1944.	1945.
MONTH.	NO. OF CASES NOTIFIED.	NO. OF CASES NOTIFIED.	NO. OF CASES NOTIFIED.
January	7	14	9
February	6	8	11
March	5	6	16
April	7	12	7
May	11	4	8
June	1	6	5
July	5	1	3
August	2	9	2
September	6	12	11
October	10	15	7
November	22	16	16
December	16	13	13
Totals:	98	116	108

The table set out below gives comparison with recent years.

	1945.	1944	1943	1942	1941	1940	1939	1938
No. of Notifications.	108	116	98	145	300	44	63	36
" " Deaths.	3	6	3	5	20	3	5	4
Fatility Rate.	2.8%	5.1%	3.0%	3.4%	6.7%	6.8%	7.9%	11.1%

Table recording the age-groups of cases of Diphtheria during 1945.

Age Groups.	No. of Cases.	No. of Deaths.	Fatality Rate.
0-1 Years	–		
1-2 "	1		
2-3 "	3		
3-4 "	3		
4-5 "	4		
5-10 "	44	1	2.3%
10-15 "	33	1	3.0%
Over 15	20	1	5.0%
Totals:	108	3	2.8%

	Treated in Hospital.	Treated at Home.	Total.
Diphtheria Cases.	105	3	108
Convalescent Carriers V.T.+.	1	Nil.	1
Healthy Carriers V.T.+.	10	Nil.	10

Children Who Have Had Diphtheria – 1945.

(During the half-year and the year, divided into those who had been immunised and those who had not, and into the age-groups 0-1; 1-5; and 10-15 years.

	JANUARY TO JUNE.				JULY TO DECEMBER.				Total for Year.
	0-1	1-5	5-10	10-15	0-1	1-5	5-10	10-15	
Immunised.	Nil	6	17	7	Nil	5	12	11	58
Not Immunised.	Nil	3	4	11	Nil	5	5	4	32
No. of Deaths in same period.									
Immunised.	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	1(Immun. 1942.)
Not Immunised	Nil	Nil	Nil	1	Nil	Nil	Nil	Nil	1

DIPHTHERIA IMMUNISATION PER YEAR.

Year	Under 5 years.	% of child population under 5yrs.	5 -15 years.	% of child population 5- 15.	% of Total child population		Case of Diphtheria not immunised.	Cases of Diphtheria after immunisation.
1937	111	Estimated	135	Estimated	246	Estimated	No record.	No record.
1938	81	population	54	population	135	pop. not	" "	" "
1939	101	not known.	415	not known.	516	known.	" "	" "
1940	87	3.4%	205	4.0%	292	3.8%	" "	" "
1941	614	24.0%	929	18.0%	1543	20.2%	267	33
1942	743	29.0%	889	18.5%	1632	22.2%	117	28
1943	606	26.4%	615	13.0%	1221	17.3%	59	39
1944	487	17.4%	94	1.7%	581	7.1%	69	47
1945	638	22.1%	190	3.5%	828	10.1%	50	58
	3468		3526		6994		562	205

YEAR ENDED 31st. DECEMBER, 1945.

Immunisation In Relation To Child Population.

Number of children who had completed a full course of Immunisation at any time up to 31st. December, 1945.

Age at 31.12.45, i.e. born in year.	Under 1 1945	1 1944	2 1943	3 1942	4 1941	5 to 9 1936 -1940	10-14 1931to 1935.	Total under 15.
Number immunised.	–	369	412	388	422	2,322	2,231.	6,144
Estimated Mid-Year Population, 1945.	2,790 Age Group 0-4(Inclusive)				5,390 Age Group 5-14(Inclusive)			

Number of Cases of Infectious Diseases originally notified during the year 1945 and of the Final numbers according to Age and Sex, after corrections subsequently made either by the Notifying Medical Practitioner or by the Medical Superintendent of the Infectious Diseases Hospital.

TABLE I

Ages etc., N.K. – Age Unknown	Scarlet Fever		Diphtheria		Whooping Cough		Measles ex Rubella		Acute Pneumonia		Dysentery		Erysipelas		Puer. Pyrexia		E.C.S.M.		Opht. Neon.		Malaria		Para-Typhoid	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Nos. originally notified.																								
Civilians.(all ages)	28	41	54	54	35	44	40	47	20	15	6	4		6		3	6	3	2	1	1		1	
Non-Civilians. -do-	1		1				1		1															
GRAND TOTALS.	69+1.NC.		108+1.NC.		79		87+1.NC.		35+1.NC		10		6		3		9		3		1		1	
FINAL NUMBERS after correction																								
0 –					8	5	1	2	4	4	2	3					1		2	1				
1 –	3	4	2	1	12	18	9	15	1	2														
3 –	7	9	3	4	10	14	13	6	4	2														
5 –	15	16	25	14	5	4	15	21	3	3	2													
Civilians 10 –	1	8	16	16		2	1	2	1															
15 –			2	7			1	1	3	2	2			1		2		1					1	
25 –	1	1	1	6		1										1					1			
45 –									4	1				4										
65 and over										1		1		1										
Total Civilians.	27	38	49	45	35	44	40	47	20	15	6	4		6		3	1	1	2	1	1		1	
GRAND TOTALS.	65		97		79		87		35		10		6		3		2		3		1		1	
Non-Civilians 15–(or N.K.)			1				1		1															
45 and over.	1																							
TOTAL Non-civilians.	1		1				1		1															

The difference in the total cases notified and final numbers after correction, is shown as follows:–

Diphtheria (11 cases) 8 re-diagnosed as Tonsillitis and Quinsey 1 as Sore Throat and 1 as a Carrier.

Cerebro-Spinal Fever (7 cases) 2 re-diagnosed as Tubercular Meningitis, 2 as Acute Polio Encephalitis, 2 as Constipation and 1 queried case.

Scarlet Fever (4 cases) 2 re-diagnosed as Food Rash and 2 as German Measles.

22 cases re-diagnosed.

TABLE 11.

INFECTIOUS DISEASES NOTIFIED (1938 - 1945.)

	1945	1944	1943	1942	1941	1940	1939	1938	Gross Totals.
Scarlet Fever	69	116	123	65	24	30	95	128	650
Diphtheria	108	116	98	145	300	44	63	36	910
Erysipelas.	6	12	13	7	10	16	34	33	131
Para Typhoid) Fever.)	1	Nil	Nil	Nil	Nil	Nil	3	2	6
Pneumonia	35	39	82	55	39	68	45	44	407
Puerperal) Pyroxia.)	3	3	6	4	6	9	7	7	45
Cerebro-Spinal Fever.	9	1	1	3	7	3	Nil	2	26
Acute Polio - myelitis.	Nil	Nil	Nil	Nil	Nil	1	1	Nil	2
Acute Enceph.) Letharg.)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	1
Dysentery.	10	2	4	1	1	18	6	1	43
Opht: -) Neonatorum)	3	Nil	2	5	5	3	2	2	22
Tuberculosis: Resp.	56	57	57	38	44	38	47	28	375
Non-Resp.	8	17	8	8	13	11	15	10	90
Whooping Cough.	79	156	90	79	299	6	4	Nil	713
Measles.	87	723	80	912	77	751	Nil	Nil	2630
Food Poisoning.	Nil	Nil	Nil	5	8	Nil	Nil	Nil	13
Malaria.	1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1
Total Notifications.	475	1242	564	1327	833	998	322	304	6065

NUMBER OF DEATHS (INFECTIOUS DISEASES) 1938 - 1945.

	1945	1944	1943	1942	1941	1940	1939	1938.	No. of Deaths.	% of deaths over 8 yrs. of gross cases notified.
Scarlet) Fever)	1	Nil	Nil	Nil	1	Nil	1	Nil	3	.4%
Diphtheria.	3	6	3	5	20	3	5	4	49	5.4%
Erysipelas.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	2	1.5%
Para or Typhoid Fever.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	-	--
Pneumonia.	9	18	26	10	23	26	14	16	142	34.8 %
Puerperal Pyrexia	Nil	Nil	Nil	2	Nil	2	Nil	1	5	11.1%
Cerebro-Spinal Fever.	Nil	Nil	1	2	1	Nil	Nil	1	5	19.2 %
Acute Polio-myelitis.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	-	---
Acute Enceph Letharg.	Nil	Nil	Nil	Nil	Nil	Nil	2	1	3	---
Dysentery.	Nil	Nil	Nil	Nil	Nil	2	Nil	Nil	2	4.6%
Ophth Neonatorum.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	-	---
Tuberculosis. Respiratory.	=20	*26	19	25	"17	31	24	20	182	48.5 %
Non-Resp	=4	4	1	6	3	4	7	5	34	37.7%
Whooping Cough.	1	2	1	Nil	4	Nil	Nil	Nil	8	1.1 %
Measles.	Nil	Nil	1	2	1	2	--	--	6	.2 %
Food Poisoning.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Malaria.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Acute Polio-Encephalitis.	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	-
TOTAL DEATHS.	40	56	52	52	70	70	53	50	443	7.3 %

= Includes Non-Notified T.B. = 3. * Includes Non Notified = 2 deaths
= " " " " 2. + " " " = 2 "

TABLE 111.

AGE DISTRIBUTION OF NOTIFIABLE DISEASES. 1945

DISEASES	Under 1 year.	1 - 2	2-3	3-4	4-5	5-10	10-15	15-25	25-35	35-45	45-55	55-65	Over 65 yrs.	Total.
Diphtheria.	-	1	3	3	4	44	33	11	9	-	-	-	-	108
Scarlet Fever	-	3	4	8	9	33	10	-	1	1	-	-	-	69
Measles.	3	6	18	8	11	36	3	2	-	-	-	-	-	87
Whooping Cough	12	18	12	13	12	9	2	-	1	-	-	-	-	79
Pneumonia.	-	3	2	1	2	5	2	2	5	3	2	5	3	35
Tuberculosis, Pul.	-	-	-	-	2	3	5	19	14	7	4	2	-	56
" Other.	-	-	-	-	-	2	-	1	3	2	-	-	-	8
E.C.S.M.	2	1	-	-	1	-	3	1	-	1	-	-	-	9
Erysipelas,	-	-	-	-	-	-	-	-	1	1	1	2	1	6
Ophth.Neonatorum	3	-	-	-	-	-	-	-	-	-	-	-	-	3
Puerperal Pyrexia	-	-	-	-	-	-	-	2	1	-	-	-	-	3
Dysentery.	-	1	1	1	2	1	1	1	-	1	-	-	1	10
Para-Typhoid.	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Malaria.	-	-	-	-	-	-	-	-	1	-	-	-	-	1
TOTALS.	20	33	40	34	43	133	59	39	37	16	7	9	5	475

In addition to the above table, Non-Civilian Cases notified were:- 1 Scarlet Fever, 1 Diphtheria, 1 Measles, and 1 Pneumonia.

HOUSING

The tendancy in planning now-a-days, is the creation of more or less independent communities with all their industrial and and Social amenities. In the future women, who are more interested than men in the inner details of house planning, should be co-opted in the Housing Committee according to section 85 of the Local Government Act 1933. Design of a house is important, and demands the services of an Architect. Local authorities are by the Housing Act 1936, (Section 85) required to give preference in letting their houses to large families, and therefore the majority of new houses should be of the three bedroom type for five persons, with W.C. separate from the Bathroom.
The question of a communal laundry is worthy of consideration and where even a tenant can have a separate unit for laundry work at a moderate cost. This saves all the disadvantages of doing the washing at home.

POST WAR HOUSING. Condition of condemned houses. An order may be applied for and granted to a local authority, but the condition of the house can be so bad that Owners can seek the protection of section 9 of the act, or may be glad if the Council would take over both land and house rather than expend money on them. Patching up these houses is false policy. Local authorities have the power to acquire land compulsorily, and if the cost is not agreed upon then it can be settled by arbitration.
Planning. Whilst it is the business of the local authority to provide the houses and help building by private enterprise, it is the Planning Committee's duty to allow a proper allocation of land for housing and its location in their scheme. Each authority is supposed now to plan its post-war housing programme for (1) Separate dwellings for families (and the aged) according to applications
(2) Overcrowded families.
(3) Replacement for Slum Dwellers (or those likely to be slums.)
Section 83, Housing Act 1936. General Management of houses is vested in the local authority. Section 85 (2) requires in the selection of tenants that preference be given to those in Insanitary or Overcrowded houses. Overriding consideration is that of need and in the assessment of need the lack of a separate home has to be regarded as an outstanding example of unsatisfactory housing conditions.

BREAD

Of all cereals, wheat bakes thebest bread. The wheat grain is a seed with outer coverings which , form the bran and two inner layers the endosperm. The inner layers are richer in protein, minerals and vitimans than the inner endosperm. It is the endosperm which gives "Strength" to the flour. Certain reducing agents weaken flour, and so Millers found that oxidising agents counteracted those reducing agents, and the flour became "stronger" and so they used these as "Improvers." Bran is demanded by breeders for feeding-stuff for cattle etc. A high extraction rate (85%) gives most of the germ with some of the inner endosperm and so retains high amount of iron and some vitamins, and prevents a serious loss of aneurine. During the war however, it was found that raising the extraction rate increased the amount of phytic acid in the flour and that this acid precipitated calcium in the intestines. (Wheat itself has very little calcium.) But luckily flour contained an Enzyme, Phytase, which hydrolised the acid. But it was further shown (by Mc.Cance & Widdowson) that the addition of calcium prevented the bad effects of phtic acid. During the war, as milk and cheese became controlled, there was a danger of calcium deficiency, and so precipitated chalk was added. If the extraction rate is lowered, the nutritional value of the flour falls.

Bread is the cheapest form of energy, and a valuable source of protein. A piece of Bread takes more time to yield its energy than a lump of sugar. The browner the flour the more phytic acid it contains, and this makes unusable, not only the calcium in the Bread but the rest of the diet, As 85% extraction contains about 3½ times as much phytic acid as white bread and about half that in wholemeal bread, it was on this account that calcium was added. (See Page 35.)

OVERCROWDING

The Housing Acts permit over-crowding beyond what should be the Hygient's Aim. The Board of Education's recommendation is that children should have as a minima 5 ft intervals between the edges of beds, 6589 ft of floor space per bed, and adequate cross-ventilation. The Ministry of Health recommends 1st. Bedroom ....150 Sq.ft.; 2nd. Bedroom 100 sq. ft. the 3rd. Bedroom 65 sq.ft. (In comparison with the Board of Education this means 1st. Bedroom will have 150 sq.ft. instead of 195 sq. ft; 2nd. will have 100 sq. ft. instead of 130 sq. ft. and the 3rd. Bedroom will have the same as that recommended by the Board.) The Royal College of Physicians reported that no room used for sleeping should be less than 160 sq.ft.

Overcrowding in Blyth, according to the definition of the Housing Act 1936, was:-

	Total per cent.	Slum Areas.	Municipal.	Others.
1944	3.78%	13%	2.56%	2.8%
1945	4.51%	14.9%	3.53%	3.26%

In 1944 there were 353 Overcrowded houses in which lived 2095 persons, giving an average of six per house.

In 1945 there were 421 Overcrowded houses in which 2540 persons were living, giving an average of 6 persons per House.

Applications for Houses :- To March 1945 there were 2708 applications for houses for which 1800 were for two Bedrooms and 662 for three bedroom houses.

Total number of applications to 31st Dec.1945 ......2,015 Assessed to points
Forms not returned for various reasons............ .2,014
Total forms issued.................. 4,029

It is not possible to give you the number of 2 or 3 bedroom type houses that would be required until all applicants have been interviewed by the Housing Estate Committee.

The number of tenants rehoused upon the Committee's Housing Estates, other than Exchanges within the schemes, is 7.

72 Applicants claiming "points" under the new system are suffering from Tuberculosis.

Housing :-The rate of construction largely depends on the supply of materials and amount of labour available. A more rapid procedure for the acquisition of sites has been promulgated, and it is pleasing to note there is to be no reduction in standard of housing. I am of the opinion that all building plans should be passed by the Medical Officer of Health with respect to Hygiene and Sanitary Standards. A Bill has been introduced fixing a minimum rent as a condition to a grant for a building licence to private builders. Houses and Flats cannot be used for non-residential purposes except by permission of the local Authority.

Unfit Houses. There are many unfit houses in Slum Clearance areas awaiting for demolition when this is possible. There are some which could be made more habitable (and should owing to the acute shortage.) There are many other houses unfit and in bad condition, as in Phoenix Street area, whose patching up would not be justified.

Provision of a Bath :- Section 72 of the Housing Act is the only reference to the provision of a fixed bath and bathroom, and that is only for any house erected by a local Authority after August 1935. Whilst local Authorities may make by-laws as to houses for the Working Classes, yet by sub-section 3 such by-laws may be limited to houses let in lodgings, and it is generally the case. If a notice were served under Act 9 of the Housing Act 1936 it would be difficult to convince a County Court judge that alterations to a house so bad, that expense for the work would be over 60 per cent pre-war, that such expenses were "reasonable" even if the house lasted another five years. By sections 90 and 91 of the Housing Act 1936 the local Authority can advance the whole or part of the cost of the work. In the case of a controlled house any improvement carried out can be a reason for increasing the rent to 8% under the Rent Restriction Act.

New Houses :- The Council propose to erect approximately 1250 houses.

MINERS PNEUMOCONIOSIS.

A recent report by the Medical Research Council, brings further light on the above. Two of the Investigators grouped the Lung Regions into four groups , viz:- dust reticulation, confluent fibrosis, mixed nodulation, and Silicotic nodulation. The concentration of Mica and Quartz it was found ran parallel with increasing fibrosis. Though they are against the view that 'clean' coal can produce tissue change in the Lungs, it has to be remembered that 'clean coal' is an artificial product of the Laboratory, and 'pure'coal' as high quality domestic coal, contains quite a proportion of Silicaceous matter, and the lungs of Trimmers (men who load coal into Ships and are exposed to very little rock dust)contained abnormal quantities of Silica, though there was no more coal there than in the Colliers. It is not thought that Kaolin takes any part in the Lesions. It is more difficult to say what part quartz and mica (Sericite) play. The concentration of both increases with the severity of the Lesions, but there is good reason to state that quartz is a fibrosis-producing agent. The rejection of Mica is from the inertness of South Wales mica when injected into animals. A question of great importance is why lungs with large quantities of quartz show only reticulation without any formation of silicotic nodules. Two explanations suggested are:- (1) The Quartz is so diluted with other inert dusts that its characteristic effects are not produced; or (2) The other dusts are not inert but lower the solubility of the quartz by coating it with a layer of Alumina and so reduce its noxious effects, this is supported by some experiments.

The results of injections into the lungs of animals are:- The primary reaction of all dusts is a Phagocytosis,(this means an attempt on the part of the white blood cells to engulf the dust particles.) Then if the dust is inert there is a minimal increase of reticulin fibrils but no Collagen (this means an increase of the network of the lung tissue). If the dust is not inert then you get inflammatory changes, so that there is a fibrinous exudate, (this means an exudate of fibrin which forms fibrous tissue which goes on to contract - such as is seen in Scar Tissue anywhere, as after a burn.) What is the proximate reason for the tissue change? Mechanical irritation is rejected; it is generally thought that Salicic Acid is formed from the solution of the noxious dust, and that this is the 'irritative'. Further experiments are being conducted. Professor King deals with the solubility of dust from Mines. All dusts had low Silica solubilities releasing much less Silica than one could expect from their Silica content. Mixture of shale and other dusts reduced the solubility of quartz owing to an Albuminous coating being deposited on the particles. 'Clean' coal also reduced the solubility but from the mineral contents in the coal. Pheumoniomiosis is much more severe in Anthracite than in other coal mines, and this was attributed to Anthracite reducing the solubility of the Quartz more than other coals did. King suggests that in some way Bituminous and Steam Coal inhibits the solubility of Siliceous matter in them, whereas Anthracite has not this property. In this way the mineral content can produce its effect either by inhibiting the Solution of Quartz, or by not preventing the solution of Siliceous material as other coals do.

Silicosis can be prevented by a jet of water through the nose of the Miner's drill.

ATMOSPHERIC POLLUTION.

We have in Blyth several ugly accumulations ("tips) from the mines. The question how far these pollute the air could only be scientifically proved by experiments by experts. But some general remarks may be of interest. It is obvious that the purer the air the healthier it is for us. Investigations would have to determine (a) the distribution of pollution, (b) the agents causing the pollution, (c) variation of pollution by meteorological conditions, by existing chimneys (industrial and domestic and from ships), (d) influence of any pollution around the borough, and the escape of pollution from the Borough. All this requires special instruments, viz:- the deposit guage, the Smoke Filter, Automatic Filter, lead peroside method for measuring Sulphur dioxide, the degree of ultra-violet radiation, etc; considerable time, knowledge and periods of working are required.

Domestic and industrial combustion is that of coal. With Domestic Consumption the particles emitted from the chimney are light as the low velocity of the gasses could not carry heavy particles and these are combustible. On the whole the reverse is with that from Industrial Plants. Suspended matter in the air is thus mainly domestic whilst deposited matter is industrial; and the Sulphur dioxide in the air is measured by the Volumetric Sulphur dioxide apparatus by which the air is drawn through a bubbler containing Hydrogen Peroxide, which dissolves it to form Sulphuric Acid which is measured by tritration. Alternatively it can be measured by the Lead Peroxide Method whereby the Gaseous Sulphur dioxide readily acts on solid lead peroxide to form Lead Sulphate, and the weight of this is determined. The Sulphur content of Coal varies from 1% to 4%. About 50% of Sulphur can be removed by washing.

When coal is made use of to form Gas, most of the Sulphur is removed from the coal (but not from Smoke), and therefore the use of gas is one means of lessening air pollution by Sulphate dioxide. The same applies to Electricity. Since 50% of smoke is through Domestic Fuel, the main problem comes to be lessening of smoke.

An ingenious instrument can measure the ultra violet radiation. Thus there are many factors to be taken into consideration in deciding the existence and variation of pollution of the air.

THE MINING INDUSTRY.

The production Officer of the National Union of Mineworkers states that in ten years time if there are no replacements there will not be a miner left in the country. Normal recruitment is less than 10,000 a year to meet a loss of 70,000 a year. The basic wage until 1948 is £5. for underground and £4.10.0. for surface workers. The miners wish a complete re-organisation of their health services. In "Britain's Coal" (W. Heineman.) It is put "on the average out of 100 miners entering the pit at fourteen 6 or 7 will be killed in the pit and 20 very seriously injured. The average miner may expect to be injured fairly seriously once every five years during his working life." The following figures are impressive but do not reveal incapacity from other lung diseases.

YEAR.	1943	1944	1945
Man-power	708,000	710,000	end of year 698,000
	38,000	45,000	70,000
"Normal" Recruitment	12,109	10,400	9,000
Accidents incapacitating for at least 3 days.	173,716+	176,847	-
Fatal accidents	713	623	545 ++
"Beat Knee" granted compensation	7478	7448++	
Nystagmus granted compensation	2006	1809++	
Deaths from Silicosis	82+ *	97+ *	
(new cases granted compensation	1322	963+ *	Jan-Jun. 30th. 2262 *

*For South Wales only. +Pro.R.Soc.Med.1944.38.59. ++Provisional figures.
(Nat.Un.Mineworkers Rep.)

I cannot see why a Canteen should not exist at every Pit Head, and a bath as well.

The community must realise that miners are doing dangerous work for their good and must put their fellow workers in the forefront of a higher social scale in the better world to be.

The average daily requirements of a working man are :- 3,400 calories in food as purchased. Of this there should be 100 gramm. of proteins: 100 gramm. of Fat(20gr. of animal origin): 500 gramm. of carbohydrates (300gramm. for every 9°F drop in external temperature, in addition.)

SANITARY SECTION.

Total number informal notices issued during 1945........785

The number of those that went to Statutory notice......429

Producing licences (T T Milk)............................	1
(a) bottling on farms....................................	1
(b) non- " licences......................................	0
Accredited Milk..	0
(a) bottling on farm.....................................	0
(b) " at other place than farm...........................	0
Pasteurised Milk licence.................................	1
Distributors licence	
(a) T T Milk...	2
(b) Others...	1 Pasteurised.

REMOVAL OF CASES TO HOSPITAL AND MAINTAINANCE.

Infectious diseases are removed on the request of the medical practitioner who is deemed to have secured the willingness of the patient. In cases where it is necessary for the removal, where a person objects to such removal, can be effected by a "Magistrate's" order (Sec. 169. P.H. Act 1936, and temporarily Sec. 168.) In the case of small pox it is advisable, to prevent delay, that the Medical Officer of Health should have power to get the "Magistrate's" order if necessary. Where case occurs in a common lodging house he has this power (Sec. 169//244. P.H. Act 1936)
Tuberculosis. Where it becomes necessary to remove a case a compulsory order can be obtained provided the Magistrate is satisfied on three points. (Sec. 172. Public Health Act. 1936.)
The Maternity & Child Welfare Committee under Section 204 of the Public Health Act 1936 can make arrangements for the care of any child, subject to the approval of the Minister of Health. By minute 1309 of 30th. October, 1940, the Blyth Council agreed to pay the maintainance charges of children sent to the Babies Hospital £3.0.0. per week and accompanying Mother at £1.10.0. per week. By Sec. 184, Public Health Act 1936, payment may be made in part or whole in any type of case.

HYPOCHLORITES IN MILK.

Under the Milk and Dairies provisional Regulations 1943 the Ministry of Agriculture (Circular 2819) approved of this use of special Hypochlorite solutions containing sodium chlorate for use of farmers for cleansing of udders and cowstalls. There should be no free sodium hypochlorite in the milk as even though in itself it is not harmful it destroys the vitamin C in milk and so reduces the nutrition value. Occasional samples should be tested when Hypochlorites is used.

POST-WAR BREAD POLICY.

The report of the special conference to advise the Government on its post-war Bread and Flour policy has been issued. It lays down certain recommendations:-

(1) It estimates the nominal daily requirements per head of the average British working class family after the war as:-

Calories	2670
Vitamin Bl	1.78 Mg.
Riboflavine	1.92 "
Nicotine Acid	13.91 "
Iron	14.60

(2) The Sub-committee recommended the following minima per 100 grammes of Flour:-

Vitamin Bl	0.24 Mg.
Nicotine Acid	1.60 "
Riboflavine	0.14 "
Iron	1.65 "

With the exception of Riboflavine, these minima could be supplied, without reinforcement, by a flour of 80% extraction; that for Riboflavine can be supplied by 85% extraction. The sub-committee estimated the daily consumption of bread after the war would be 9.4 ounces (265 grammes) per head. On this basis and on the recommended standard of flour this would not provide more than a fifth of the required riboflavine. The necessary intake of riboflavine would have to come from milk, meat, eggs, potatoes and other vegetables. The conference did not think it justifiable to raise the extraction to get more riboflavine. They thus adopted the minimum standard to be as above without any standard for riboflavine.

(3) The Medical and Scientific members urged regulations to ensure the retention of natural nutrients in the flour, and prohibiting the addition of Vitamins. After considering the variations of different flours (generally Home-grown Wheat has less vitamin B than Canadian Wheat), etc, it was considered unfair to the Home Industry to insist on a minimum reduction rate. The 80% flour now in use was more popular than the 85% with the public, Baker and Miller. The Consumer gets less Vitamin Bl with biscuits and cakes because baking powders destroys half of it. (See Page 30.)

SAFETY OF ICE-CREAM.

Ice-cream is capable of spreading bacilli of the enteric group, dysentery and Scarlet Fever, and it is suggested that some cases of food poisoning were due to Staphyldcocci conveyed by ice-cream. Now that dried eggs have been used in its preparation the public are protected by any infection from them by a new order by the Ministry of Food (Dried Egg (control of use) order 1945). This prohibits without a licence the use of dried eggs in the manufacture of Synthetic Cream, ice-cream, and baker's cream filling. This licence makes it compulsary for the manufacturer to pasteurise a mixture containing dried egg. Further not more than two hours must elapse between reconstituting and pasteurising the dried egg; and the treated product must not be exposed to a temperature at which disease germs can flourish. It might be of interest to note that in America ice-cream made from un-pasteurised milk contained as many as thirty seven million organisms per C.C.M.

SLAUGHTER HOUSES.

(Abattoir.)

Since the Public Health (Meat) Regulations 1924, our meat became under better supervision. The method of slaughtering was made uniform under the Slaughter of Animals Act 1933.

For the thorough inspection of meat and pevention of disease, animals should all be examined immediately before slaughter. The Inspector must be present at the time of slaughtering, and examine the viscera as they are taken out. It is preferable to have the carcase examined in a separate apartment from the Slaughter-house. The carcase can be contaminated by germs from fouling of the floor and intestinal contents etc; and so meat can patrify. Cold storages are necessary. In a well conducted Abattoir the animals would be hosed down and passed through a foot bath before being slaughtered. Hot water should be at hand to sterilize equipment readily. Thorough washing down soon after is essential. All this can be done by centralisation of slaughtering.

Under the Food & Drugs Act 1938 Local Authorities with a population below 40,000 ceased to be Food and Drug authorities unless the County Council delegate its powers to them.

MILK (SPECIAL DESIGNATIONS) REGULATIONS. 1936-1946

Prescribed tests for pasteurised milks, come into operation on the 1st March 1946. The effectiveness of the phosphatse test as a test whether milk has been adequately heat-treated is now well established, and the Minister has decided that compliance with the test should be added to the conditions of a licence for Pasteurised milk and Tuberculin Tested Milk (Pasteurised). At the same time, the Minister is advised that the plate-count test, as prescribed for these milks in the Milk (Special Designations) Order 1936, is defective not only because a wide margin of error appears inevitable in arriving at the result of the count, but more particularly because the test takes account of heat resistant organisms whose presence is of no material significance for the safety or the keeping quality of the milk. The Minister has, therefore, as an immediate step and pending any further revision of the conditions relating to licences for these Milks which may be necessary, made the new Regulations which rescind the plate-count test and require that both Pasteurised milk and Tuberculin Tested milk (Pasteurised) shall comply with the phosphatase test and with the methylene blue test in the form in which those tests have already been prescribed for Heat-Treated milk by the Heat-Treated Milk (Prescribed Tests) Order 1944. The details of the methylene blue test, as now prescribed for Pasteurised Milk, differ from those prescribed in the Milk (Special Designations) Regulations, 1936-1943, in relation to raw designated milks. Samples should not be packed in ice for transport to the laboratory, but should be kept at atmospheric shade temperature and protected from the direct rays of the sun..

The Society of Medical Officers of Health recommended to the Ministry of Health the inclusion of a B.Coli test for bottled Pasteurised Milk. As a high Coliform content is revealed by the Methylene Blue Test it is now proposed to include this in the draft regulations to operate from the 1st January 1946. It is open to local authorities to make use of the coliform or other tests if they find it of assistance. The Minister is considering any strengthening of the Milk & Daries Regulations regarding cleanliness of bottles, plant, etc; in the dairies.

MILK & WATER SAMPLES. 1945

Milk	Number of samples.	Good	Bad
Bacillary Count for			
Pasteurised Milk :-	31	25	6
Methylene Blue :-	128	76	52
Phosphatase :-	8	8	--
Clean Bottles :-	11	9	2
	178	118	60
Water	30	30	

SAMPLES.	SOURCE.	ANALYSIS.	RESULT.
NIL.	Hepscott after filtration. Not chlorinated. (Bobside Reservoir.)	Bacteriological.	NIL.
10	Hepscott and Newcastle mixed and chlorinated. (Bebside Reservoir.)	Bacteriological.	Satisfactory.
1	Ditto		

Ten samples of Newcastle chlorinated water at Bebside Standpipe & ten of Tynemouth chlorinated at Standpipe, Sandy Island were bacteriologically satisfactory.

RODENT CONTROL.

I have brought this subject before my Council adequately, viz:- Various circulars and reports, so I shall just summarise the situation.

1. The Rats and Mice (Destruction Act 1919) throws the obligation of destruction and prevention of rodents, on any Occupier of Land and Buildings under penalty.
2. The local Authority - as of Blyth - has the obligation to adminster the Act if the County Council delegates its powers, as it has.
3. If the local Authority then fails to do so, the Board of Agriculture can perform the duties and charge the local Authorities with costs.
4. The Infestation Order 1941 was issued by the Ministry of Food, which took over from the Ministry of Agriculture; and the Minister of Food is now the responsible officer under the 1919 Act.

5. In 1943 a Consolidatry Order - The Infestation Order 1943 was issued. This provides (1) that the Occupier of any Land, or the Owner of any Food, etc shall on infestation give notice to the Minister. (2) The Minister then gives direction to such person as to prevention or mitigation. (3) The Minister may issue directions to the local authority as to (a) reports on the complaints (b) steps that are being taken, or to take, and (c) to any such direction. It also states that after "appointed day" (not "appointed" to date) no person can engage in pest control except by licence.
As regards finance, all new expenditure over and above that spent by March 1938 is re-embursed. Since occupiers are responsible to remedy any infestation, local authority must recover the cost of any work done for him. Cost of maintenance and staff is recoverable. The cost of de-ratization of the Authority's premises is their own cost and not recoverable. The maintenance treatment of Sewers requires to be done six monthly, and the work necessitates the services of a whole-time man. The refuse tips require constant attention. Our Rat-Catcher does his work conscientiously.

SUMMARY OF RAT-CATCHERS WORK. FEB - DEC. 1945. (Ex. AUG - SEPT.)

Month	Visits	Pre-baits laid.	Poison baits laid.	Traps laid.	Holes Gassed.	Kill		Bodies Recovered.
						Rats	Mice	
Feb.	187	266	143	---	---	97	150	28
Mar.	145	---	157	---	256	396	100	20
April	274	132	197	25	---	151	124	29
May	277	234	209	---	---	244	305	52
June	266	216	181	10	26	209	240	19
July	250	424	152	---	--	272	160	44
Oct.	103	482	120	58	--	208	50	53
Nov.	117	556	172	15	--	299	44	114
Dec.	97	382	104	10	--	110	52	34
TOTALS.	1716	2692	1435	118	282	1986	1225	393

DISINFECTANT STOCKS.

Received 1945	Value	Balance 3.12.45	Value.
46 Galls White Disifectant.	£8. 1.0	10 Galls.	£1.15.0
9 Galls Formaldehyde	4.10.6	2 Galls.	1. 0.0
20 Galls. Zaldecide.	8.10.0	10 Galls.	4. 5.0
4 Doz. Fumoids.	6.12.0	4 Doz.	6.12.0
4 Lbs Kromo.	19.0	2 Lbs.	9.6
Total Value received......	£28.12.6	Value in Hand........	£14. 1.6

D.D.T. (Dicholoro-diphenyl-trichlorethane).

D.D.T. is a white crystalline solid with a faint but not objectionable smell. Its toxicity depends on the position of its chlorine atoms. It dissolves in organic solvents but hardly in water. The drug acts as a nerve poison, causing muscular tremers, convulsions, paralysis, and death. The dose required is extremely small, it is cheap and easy to apply. As the powder form is only slightly soluble in water, in this form it is very difficult for the skin to absorb it. With oily solutions or suspensions the risk of toxic effects was much greater as these forms were easily absorbed through the skin or mucous membranes (the red tissue lining of the lips and mouth). Of the media for oily suspensions Olive Oil seems to be the worst for fatalities.

D.D.T. in the form of a slightly moistened powder (as from sweat from powdered garments) need cause no harm. Professor Cameron found no ill affects in man with D.D.T. powder, and sprays of the concentration was kept low (not above one per cent). He advises care in handling concentrates, any such on the skin should be washed off with soap and water as early as possible. People working with concentrates should wear gloves and protective garments, and those spraying should wear respirators.

With five per cent D.D.T. in Kerosene it is simple to control bed-bug infestation. It is important in using D.D.T. Spray to use a coarse spray, not coarse enough to be wasteful, but liquid enough for the injected spray remaining on the wall. D.D.T. has no affect on Scabies.

Legislation is required to have all Containers stating the percentage of D.D.T. and accurate directions for use. For Head Lice it has proved more acceptable than Lethene as it does not sting and has no special smell. The powder is lethel to all lice.

The one thousandth part of a one thousandth part of a gramme (a gramme is roughly 15 grains) put on a 15 c.m. square will kill a fly if it alights on it. This is about 0.6 ounce to an acre.

Surfaces sprayed with D.D.T. leave a uniform film which retains a lethal crystalline deposit for some time. This gives a "residual activity" to the D.D.T. which other insecticides do not posses. For this indoor residual spraying you must carry out a systematic programme of measuring the total surfaces to be treated, and thus assess amount of insecticide required, also time and labour. Only food need be removed from the room which has its doors and windows closed. The Sprayer should be held 1½ to 2 ft from the surface. For residual spraying D.D.T. is dissolved in Kerosene to the extent of 5% weight/volume of D.D.T. This represents one ounce D.D.T. in a pint of Solvent. For treating insect breeding places Diesil Fuel Oil can be used. For flies you require two quarts of a five per cent D.D.T. solution per 1,000 sq. ft. For their breeding places you need eight ounces of it per 100 sq. ft. All Sprayers need careful cleaning to prevent rust and deterioration of rubber parts, etc.

PENICILLIN.

The Drug prevents the development of the germs which are sensitive to it by interfering with the Chemical products in the blood and tissue cells, and which are essential to their development. This is called a bacteriostatic action. An important point in treatment is that the drug is not toxic even in a pure form, As its action is not interfered with by the presence of pus, it can be used both locally and systematically. Acids of the stomach destroy it and so it is not suitable for giving it by the mouth, Certain germs in the air destroy it, so that it must be kept in sealed air-tight containers. Preparations for injections into the Muscles must be kept in rubber-stoppered bottles and stored in a refrigerator.

It has now been found that Penicillin will cure mastitis in cows.

SUMMARY OF WORK RE SANITARY INSPECTORS - 1945

RE NOTICES SAMPLES OF MILK AND WATER.

				TOTALS 1945.	TOTALS, 1944.	
Complaints				1424	1361	
Informal Notices served.				789	652	
Statulory " "						
Sec. 39.	(Drains etc.)	97			100	
Sec. 45.	(W.C. Repairs.)	54			41	
" 56.	(Yards etc.)	10			16	
" 75.	(Dustbins.)	117			55	
" 93.	(Nuisances.)	144			92	
" 138.	(Water supply and waste.)	6			3	
Shops Act	(Sec. 10.)	1	–	429		= 307
Milk Samples and Bottles				178	288	
Water Sample.				30	37	

TABLE OF ANIMALS INSPECTED.

	1938	1939	1940	1941	1942	1943	1944	1945
Cattle	1494	1722	1605	1275	1645	1807	1659	1656
Sheep	5794	5032	8806	8091	7366	5258	5049	5411
Pigs	3097	2823	1107	623	83	99	80	123
Totals	8358	9577	11518	9917	9094	7164	6788	7190

In 1944 there were 119 slaughtering days, and in 1945 there were 135.
At 3 days per week roughly 46 killed per day.

SANITARY SECTION.

Differentiation of 1424 complaints received during 1945 under common known causes with approximate totals – some complaints conern more then one heading.

MONTH.	BINS.	DISREPAIRS OR DEFECTS.	DRAINS	INSPECTION & CONDEMNATION OF FOOD.	CEILINGS.	DAMPNESS.	ROOF.	GUTTERS.	W. C.	WINDOWS	OVER-CROWDING	RATS	TOTAL COMPLAINTS RECEIVED.
Jan.	80	12	7	5	4	6	9	5	1	1	2	7	163
(62 on 24th)													
Feb.	15	15	8	6	4	7	6	2	3	–	–	7	108
Mar.	72	14	7	10	–	7	–	4	4	–	–	11	194
(63 on 22nd)													
Apr. to 19th.	1	8	4	4	1	1	–	3	3	1	–	5)	
20th–30th	–	3	5	4	3	–	1	1	5	–	1	2)	97
May	2	18	7	5	5	3	2	1	1	2	–	10	114
June	th. 45	7	12	5	1	2	1	1	4	–	–	3	135
21on27(36on 7th)													
July	21	17	20	18	1	1	3	6	–	–	2	1	126
Aug.	–	13	5	27	2	–	7	1	2	1	–	1	99
Sept.	17	5	7	19	–	2	–	–	3	–	1	1	75
Oct.(5c on 30th)	2	1	4	6	2	1	–	1	–	–	1	1	150
(31 on 26th)													
Nov.	2	18	9	18	1	2	3	1	2	–	–	2	90
Dec.	6	7	9	32	1	1	2	–	5	2	–	–	73
	344	138	104	159	25	33	34	26	33	7	7	51	1424

SCABIES CLINIC 1945.

	SCHOOL CHILDREN	M. & C.W.
Baths	626	61
Dressings	394	37
Examination by M.O.H.	337	36
New Patients	165	30
Recurrences	17	1
Number of Adult Contacts	230	3
" " " " Treated	15	–

SCHOOL CHILDREN 1945.

MONTH	BATHS.	DRESSINGS.	Exam. by M.O.	NEW PATIENTS	RECURRENCES.
Jan.	92	51	46	30	–
Feb.	86	79	32	21	–
Mar.	85	127	78	30	4
	263	257	156	81	4
Apr.	12	–	15	7	–
May	32	11	12	7	1
Jun.	86	9	47	20	–
	393	277	230	115	5
Jul.	7	–	9	2	1
Aug.	–	–	–	–	–
Sep.	18	16	21	12	6
	418	293	260	129	12
Oct.	93	39	43	17	–
Nov.	54	26	26	17	3
Dec.	61	36	8	2	2
	626	394	337	165	17

M.&.C.W. 1945.

MONTH	BATHS.	DRESSINGS.	Exam. by M.O.	NEW PATIENTS.	RECURRENCES.
Jan.	6	2	2	7	–
Feb.	9	8	5	5	–
Mar.	19	20	14	5	1
	34	30	21	17	1
Apr.	7	1	6	3	–
May.	6	2	1	2	–
Jun.	2	–	3	1	–
	49	33	31	23	1
Jul.	1	–	–	1	–
Aug.	–	–	–	–	–
Sept.	4	2	2	2	–
	54	35	33	26	1
Oct.	5	–	2	3	–
Nov.	–	–	–	–	–
Dec.	2	2	1	1	–
	61	37	36	30	1

OVERCROWDING SURVEY. HOUSING ACT, 1936.

WARDS:	BEBSIDE.		CROFT		DELAVAL		PLESSEY		RIDLEY		WATERLOO		Whole Borough without Council Houses or Clearance Areas.		All Council Houses in Borough.		Whole Borough		1945 Annual Report.
	B		C		D		P		R		W								
	Holdings	%	Holdings	%	Holdings	%	Holdings	%	Holdings	%	Holdings	%	Holdings	%	Holdings	%	Holdings	%	
O/C	34	6.2	67	5.3	10	3.1	30	3.3	24	1.3	46	2.6	211	3.2					O/C
U/C	513	93.8	1187	94.7	305	96.9	878	96.7	878	98.7	1662	97.4	6286	96.8					U/C
TOTAL	547	100.0	1254	100%	315	100%	908	100%	1765	100%	1708	100%	6497	100%					Total
	B.S.		C.S.		D.S.		P.S.		R.S.		W.S.		All Clearance area holdings in Borough.						-
O/C	40	11.9	25	16.1	11	15.9	30	24.2	17	12.7	21	14.6	144	14.9					O/C
U/C	295	88.1	130	83.9	58	84.1	94	75.8	117	87.3	123	85.4	817	85.1					U/C
TOTAL	335	100%	155	100%	69	100%	124	100%	134	100%	144	100%	961	100%					Total
	B.M.		C.M.		D.M.		P.M.				W.M.								
O/C	1	2.3	20	5.5	5	1.3	40	3.7	–	–	–	–			66	3.5			O/C
U/C	42	97.7	344	94.5	378	98.7	1035	96.3	–	–	5	100%			1804	96.5			U/C
TOTAL	43	100%	364	100%	383	100%	1075	100%	–	–	5	100%			1870	100%			Total
	Whole Ward		Whole Ward		Whole Ward		Whole Ward		Whole Ward		Whole Ward		Whole Borough without Council Houses Sum Total		Sum Total		Sum Total		
O/C	75	8.1	112	6.3	26	3.3	100	4.7	41	2.2	67	3.6	355	4.7	66	3.5	421	4.5	O/C
U/C	850	91.9	1661	93.7	741	96.7	2007	95.3	1858	97.8	1790	96.4	7103	95.3	1804	96.5	8907	95.5	U/C
TOTAL	925	100%	1773	100%	767	100%	2107	100%	1899	100%	1857	100%	7458	100%	1870	100%	9328	100%	Total

KEY:
O/C = OVERCROWDED
U/C = UNCROWDED
B.S = BEBSIDE SLUM
B.M.= BEBSIDE MUNICIPAL

REPORT ON OVERCROWDING SURVEY - BOROUGH OF BLYTH, 1945.

FAMILIES	Number of families containing the equivalent number of PERSONS shown at head of each column.													Total	Over-Crowded	% Over-Crowded	Borderline Cases.
Number of Units.	Up to 1	1½ and 2	2½ and 3	3½ and 4	4½ and 5	5½ and 6	6½ and 7	7½ and 8	8½ and 9	9½ and 10	10½ and 11	11½ and 12	12½ and over				
Total Families	729	2463	2924	1760	827	388	156	47	23	4	5	2		9328			
No. of Overcrowded Families in the Previous line.	-	-	24	131	66	102	57	23	14	2	2				421	4.5	362
DWELLINGS.	Number of DWELLINGS with the "PERMITTED NUMBER" shown at the HEAD OF EACH COLUMN.																
PERMITTED NUMBERS	Up to 1	1½ and 2	2½ and 3	3½ and 4	4½ and 5	5½ and 6	6½ and 7	7½ and 8	8½ and 9	9½ and 10	10½ and 11	11½ and 12	12½ and over				
Total Dwellings	1	142	1129	77	3143	975	971	1335	710	348	235	74	188	9328			
No. of Dwellings Overcrowded in the previous line.	-	25	184	2	129	41	33	7	2	-	-	-	-		421		Each holding constitutes a "DWELLING."

"PERSONS" means "UNITS".

i.e. Adults = 1 UNIT.
CHILDREN under 10 years of age. = ½ UNIT.
CHILDREN under 12 months not counted.

TABLE SHOWING OVERCROWDING FIGURES FOR SUCCESSIVE YEARS.

YEAR.	Number Overcrowded.	Percentage Overcrowded.
1935	985	10.99
1936	867	9.14
1937	564	5.93
1938	489	5.12
1939	378	3.93
1940	322	3.35
1941	420	4.47
1942	384	4.12
1943	359	3.85
1944	353	3.70
1945	421	4.51

Housing Act, 1936 - PART IV. OVERCROWDING. 1945.

(a) 1. Number of dwellings overcrowded at end of year 421 +
2. " " families dwelling therein 421 +
3. " " persons " " 2540 +

(b) Number of new cases of overcrowding reported during the year. 81 +

(c) 1. Number of cases of overcrowding relieved during the year. 13 –
2. Number of persons concerned in such cases 70 –
3. " " cases of overcrowding relieved in houses owned by the Local Authority (included in (c)1.) 2 –
4. Number of cases of overcrowding relieved in the course of Slum Clearance operations. Nil

(d) Particulars of any cases in which dwelling houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding Nil

(e) Any other particulars with respect to overcrowding conditions, upon which the Medical Officer of Health may consider it desirable to report:-

Where Holdings are situated.	No. of Holdings.	No. of O/C Holdings	o/c Percentage of Total No. of holdings.	o/c Percentage of No. of holdings in each area.
In Municipal Houses	1870	66	.71	3.53
In areas scheduled for clearance.	961	143	1.53	14.90
In houses other than the above.	6497	212	2,27	3.26
Totals	9328	421	4.51	

o/c = Overcrowded.

OVERCROWDING PERCENTAGE 1936 and 1945.

Year.	Slum Clearance.	Municipal.	Privately Owned.
1936	21.83	4.92	6.81
1945	14.90	3.53	3.26

OVERCROWDING.

Year	Overcrowding percentage of Total No. of Holdings in Borough of Blyth	Overcrowding percentage of Number of Holdings in each area		
		Slum Clearance	Municipal	Privately Owned.
1935	10.99	24.30	5.54	8.41
1941	4.47	15.48	3.10	3.18
1944	3.78	13.00	2.56	2.8
1945	4.51	14.90	3.53	3.26

In 1944 there were 353 overcrowded houses in which lived 2095 persons, giving an average of 6 per house.

In 1945 there were 421 overcrowded houses in which lived 2540 persons, giving an average of 6 per house.

MATERNITY & CHILD WELFARE PAYMENTS - 1945. (INCOME).

DATE. 1945.	Tonsils & Adenoids.	Dental Tickets.	Maternal Dentures.	Spect-acles.	Maternity Outfits.	Maternity Sets.	Sun-Ray Tickets.	Mothers' Advisory Clinic.	Other Fees.	TOTAL.
Jan.	-	3. 6.	£ 3. 0. 9.	-	1. 0.	-	8. 3.	£2. 0. 0.	-	£ 5.13. 6.
Feb.	-	3. 6.	£ 4. 6. 0.	£1.10.11.	-	£1. 7. 0.	13. 0.	3. 7. 0.	1. 0.	£11. 8. 5.
Mar.	6. 0.	5. 0.	£10. 0. 0.	-	3. 0.	2.14. 0.	£1. 2. 6.	6. 3. 9.	-	20.14. 3.
April.	6. 0.	-	-	1.16.10.	1. 0.	2. 9. 6.	1.13. 9.	3. 0. 0.	-	9. 7. 1.
May.	-	2. 6.	-	1.15. 1.	-	4. 6.	-	2. 0. 6.	3. 0.	4. 5. 7.
June.	-	-	1. 0. 0.	16. 6.	£1. 2. 6.	-	2. 6. 3.	2.10. 0.	-	7.15. 3.
July.	12. 0.	-	1.15. 0.	-	-	1. 7. 0.	1. 8. 3.	5. 6. 0.	7. 6.	10.15. 9.
Aug.	-	-	7. 6.	1.13. 0.	-	4. 6.	19. 3.	1. 0. 0.	-	4. 4. 3.
Sept.	-	-	5.12. 6.	-	9. 0.	1. 7. 0.	18. 3.	3. 8. 6.	-	11.15. 3.
Oct.	12. 0.	4. 0.	6. 7. 6.	1.10. 6.	1. 0.	13. 6.	-	4. 7. 0.	-	13.15. 6.
Nov.	13. 0.	9. 6.	5. 0.	16. 6.	6. 6.	4. 6.	1.10. 0.	1.10. 0.	£3.12.0.	9.12. 0.
Dec.	-	3. 0.	3.18. 3.	1.12. 3.	-	4. 0.	12. 3.	-	2. 4.9.	8.14. 6.
TOTALS:	£2.14.0.	£1.11. 0.	£36.12. 6.	£11.11. 7.	£2.4. 0.	£10.15. 6.	£11.11. 9.	£34.12. 9.	£6. 8. 3.	118.1. 4.

GRAND TOTAL: = £118. 1. 4.

MATERNITY HOME CHARGES.

NUMBER: ____________
WEEKLY - 100/-
DAILY - 14/3

NAME: ______________________________

ADDRESS: ______________________________

____

FAMILY DOCTOR ______________

DATE OF BOOKING ______________

APPROX. DATE OF CONFINEMENT. ______________

NO. IN FAMILY ______________

NO. OF ROOMS ______________

	£.	S.	D.	£.	S.	D.
GROSS INCOME						
LESS ALLOWANCES						
HUSBAND & WIFE	2.	15.	0.			
CHILDREN (10/- each child.)						
RENT & RATES						
NETT INCOME						

AMOUNT TO BE PAID WEEKLY BY PATIENT.

	£.	S.	D.
50% OF FIRST £1. OR PART OF NETT INCOME			
75% OF SECOND £1. " " OF NETT INCOME			
100% OF BALANCE.			
TOTAL			

	£.	S.	D.
FEE FOR HOSPITAL OR HOME			
" " PATIENT			
" " BOROUGH			

AMBULANCE CHARGE: 35/- , or free for Miner's wife, or remission in case of need.

NOTES: Applicable to all Maternity Homes or Hospitals for Blyth residents, wives of all Servicemen free.

BLYTH SCHOOL MEDICAL DEPARTMENT.

STATISTICS FOR 1945

ROUTINE MEDICAL INSPECTION AT SCHOOLS.

	Entrants			Inter-mediates	Other Ages.		Leavers			Total
	4	5	6	8 - 9	7	10 - 11	12	13	14	
Number of children Examined :-	3	503	127	212 - 278	54	81 - 16	368	248	29	1919
Number of Children referred for Treatment :-		113	34	24 - 43	18	13 - 3	51	35	5	339
Number of Children referred for Observation :-		12	5	3 - 7	1	2 - 0	9	4		43

Classification of the Nutrition of children inspected during the Year 1945.

Age Groups	No. of Children Inspected	A. Excellent No.	%	B. Normal No.	%	C. Slightly Sub-normal No.	%	D. Bad No.	%
Entrants (4,5,6, yrs)	633	265	41.8	318	50.2	48	7.5	2	0.3
2nd Age Group (8,9 yrs)	490	122	24.8	266	54.2	59	12.04	43	8.7
3rd Age Group (12,13,14,yrs)	645	153	23.7	218	33.7	123	19.06	151	23.4
Other Routine Inspections (7,10,11 yrs)	151	52	34.4	67	44.3	29	19.2	3	1.9
TOTAL	1919	592	30.8	869	45.2	259	13.4	199	10.3

DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION AT SCHOOLS.

DEFECT OR DISEASE.		REFERRED FOR TREATMENT	REFERRED FOR OBSERVATION.
Skin	Ringworm :-		
	Scalp		
	Body		
	Scabies	14	
	Impetigo	8	
	Other Diseases (Non-Tuberculous	37	
Eye	Blepharitis	3	
	Conjunctivitis	2	
	Keratitis		
	Corneal Opacities		
	Defective Vision (excludingsquint)	85	
	Squint	4	
	Other conditions	4	
Ear	Defective Hearing	8	
	Otitis Media		
	Other Ear Diseases	22	
Nose and Throat	Chronic Tonsillitis only	10	5
	Adenoids only		
	Chronic Tonsillitis & Adenoids	7	1
	Other conditions	19	
Enlarged Cervical Glands (Non-Tuberculous)			
Defective Speech		3	
Heart & Circulation	Heart Disease :-		
	Organic		8
	Functional		1
	Anawmia		
Lungs	Bronchitis	5	
	Other Non-Tubercular Diseases		
Tuberculosis.	Pulmonary :-		
	Definite		
	Suspected	17	
	Non-Pulmonary :-		
	Glands		
	Bones and Joints		
	Skin		
	Other Forms		
Nervous System	Epilepsy		
	Chorea		
	Other conditions	1	1
Deformities	Rickets		
	Spinal Curvature		
	Other Forms	32	
Other Defects and Diseases		86	29
	TOTAL -	367	45

N.B. The figures do not include
those referred for Nutritional defect

EXAMINATIONS AND RE-EXAMINATIONS AT SPECIAL CLINIC - 1275.

There were 89 Special Clinics.

BEULAH HOUSE 1945
(Domestic Expenditure.)

Date of Order.	Hard Soap	Toilet Soap	Floor Polish.	Toilet-rolls	Floor cloths.	Matches.	Domestos.	Mops.	Vim.	Zebo	Fire lighters.	Dusters.	Harpic.
4494 9.1.45	7 lbs 3/6d	1 lb 1/9d	1 7d	2 2/2	6 7/6d	6 9							
4517 31.1.45						3 9d	1 1/-	1 6/-					
4526 10.2.45	14 lbs 8/2	1 lb 1/9	1 1/6						3 1/9				
4550 10.3.45	7 lbs 4/1	1 lb 1/9		2 2/2			1 1/-		2 1/3	1Z 1M 1/4	72 15/-	6 9/-	
4572 16.4.45.			1 1/9	2 2/2		6 9d							
4583 27.4.45	7 lbs 4/1	1 lb 1/9		2 2/2		6 9.							
4607 1.6.45	13 lbs 7/7	1 lb 2/-	1 7½		6 7/6		1 1/-		3 1/9	1M 1/3			
4632 10.7.45	13 lbs 7/7	1 lb 2/-			6 7/6	12 1/9		1 2/11	2 1/2	1Z 10d 1M 1/3			
4648 1.8.45				3 3/3			1 1/-						
4661 29.8 45	13 lbs 7/7	1 lb 2/-	1 1/2	2 2/2		12 1/9	1 1/-		3 1/9				
4673 4.10.45.	7 lbs 4/1	1 lb 2/-		3 3/3				1 2/11	3 1/9		1 grs £1/10.		
4685 8.11.45	7 lbs 3/6	1 lb 1/9	1 1/2		6 7/6		1 1/-		3 1/9				
4706 11.12 45	7 lbs 4/1	1 lb 1/9	1 1/2	3 3/3		12 1/9		1 2/11	3 1/9			6 9/-	1 1/-
TOTALS	95 lbs 54/3	10 lbs 18/6	7 tins 7/11½	19 20/7	24 30/-	5 doz 8/3	6 6/-	4 14/9	22 12/11	3M 2Z 4/8	1½ grs 45/-	12 18/-	1 1/-

TOTAL AMOUNT £12..1..10½

POSTAGE ACCOUNT 1945

1945	A.R.P.	M.O.H.	S.I.	Swabs.	Bloods.
January.	NIL.	5.10. 0½	8. 9½	3.0	1. 10½
February.	Nil.	3.12.11	8.11½	3.10½	2. 0
March.	1. 9	2. 6. 2½	11. 0½	3. 9½	2. 0
April	Nil.	3.10. 3½	12.11½	7. 5	1. 9½
May.	1. 3	2.19. 9½	17. 5	5. 8	1. 8½
June	11. 2	2.19. 8½	1.11.4	4. 3	1. 1
July.	Nil.	3. 8. 2½	16. 2½	2. 2	2. 1
August	Nil.	2.10. 2½	3. 7½	9	2. 7½
September	Nil.	3. 5. 3	12. 5	4.10½	2. 8½
October	Nil.	3. 6. 5½	8. 5½	4. 2½	2. 7½
November	Nil.	3. 2.10½	16.10	6. 0½	3. 6½
December	Nil.	3. 4.10	16. 7	3. 7	3. 3
TOTALS.	14. 2	£39.16. 9½	8. 4.7½	£2.11.7	£1.7. 3½